

Jumbo Glacier Resort Master Plan

Appendix 1-A

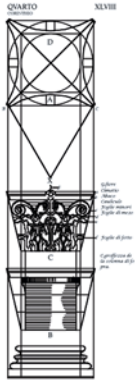
Profile of Project Consultants

Pheidias Project Management Corp.

Mr. Oberto Oberti

Suite #1660 – 1188 West Georgia Street

Vancouver, BC V6E 4A2



THE COMPANY GROUP

The Company Group was founded in 1976 and since then it has refined and expanded its service capabilities, ranging from planning, designing and building large scale projects to detailed design of interiors. The Group is unique because it can offer the full spectrum of development services in one package, from new town planning, architectural and interior design, to development and construction management, as well as offering services separately in the various design disciplines. It has also assisted in arranging project financing and project marketing, drawing from a wide background of experience and worldwide connections.

The Group consists of **Pheidias Development Management Corporation, Pheidias Project Management Corporation, Oberto Oberti Architecture and Urban Design Inc.** (formerly Oberto Oberti Inc., Architecture and Urban Design), and its division **Oberti Interiors**.

Pheidias pioneered a number of unique initiatives, starting in 1976 with the first residential luxury highrise in Greater Vancouver on the waterfront of West Vancouver, that opened the way to a booming market.

It pioneered resort development at Whistler in the 1970s with the Twin Lakes project and again in the 1990s with the first project in the Village North expansion, now called Twin Peaks Resort. In the Downtown District of the City of Vancouver the group obtained the first rezoning for a fully residential luxury highrise in the history of the city's Downtown District, thus changing the plan of the city and achieving the integration of uses for which it is now renowned in North America.

The Group has won awards in interior design, architecture, heritage restoration and planning. It has been successfully involved in major public review processes since its formation and it has been providing community leadership in many project approval applications as development managers. In a referendum held in 1997 for a resort project near Banff National Park, west of Golden, B.C., it obtained a Canadian record with a 93.8% vote of approval from the community and a 33% greater voter turnout than at political elections. It was a project that again showed new ways in resort development, generating worldwide media attention. The project, now under construction, is called Kicking Horse Mountain Resort, and is the first to be built out of a number of mountain resorts in various stages of planning approvals. It continues to receive great reviews from a variety of magazines and newspapers, including the New York Times.

The philosophy of the group is that the same creativity and discipline apply to all design and development projects, and that no project is too large or too small for a better idea.

COMPANY WEB SITES

www.obertiarchitecture.com

www.obertiinteriors.com

www.pheidias.ca

Oberto Oberti

B. Arch., M. Arch., M.R.A.I.C., M.A.I.B.C.

Oberto Oberti studied engineering and architecture in Italy and Canada, obtaining a Bachelor of Architecture from the graduate school of design of the University of British Columbia in 1969. In 1974 he obtained a Master of Architecture with combined studies in the graduate school of design and of community and regional planning of the University of British Columbia. He worked in engineering and architectural offices until he became the Architect in charge of technical services for the Dunhill Development Corporation in 1974. That same year, he also became a registered architect in British Columbia. In 1977 he initiated his first independent project and established Pheidias Project Management Corporation and Oberto Oberti Architecture and Urban Design, which he has directed since then, winning a number of design and project management awards.



As head of the Architectural Division of the Dunhill Development Corporation Ltd., Mr. Oberti was in charge of the design of exciting commercial developments and of major projects since the 1970s, including the new town plan for the Town of Colwood, west of Victoria, and the negotiations with the Capital Regional District leading to the redevelopment of the Songhees Peninsula, in Victoria. These visionary projects involved infrastructure of over two hundred million dollars and are now achieving an overall investment level that is surpassing the original development plans.

Mr. Oberti provides leadership with innovative concepts and a unique message but, more importantly, Mr. Oberti has successfully managed the planning, design, and construction of a number of significant projects and companies that generated leading edge developments, from Tristar Industries in the Tilbury Island Industrial Park to the first hotel in the Village North expansion at Whistler. Recently, he spearheaded the successful start of Kicking Horse Mountain Resort near Golden, B.C., for which he received the B.C. Canadian Entrepreneur Award. This is not only another unique project but also the first project of its kind in Canada in the last twenty-five years. This project, which will include hotels, condominiums, townhouses and single-family dwellings to create a new resort village, is typical of the innovative work that Mr. Oberti and his companies can create.

JUMBO GLACIER RESORT – CONSULTANTS

In the course of his work Mr. Oberti has had many occasions to develop relationships in business and in Government, including leading members of the banking industry, Ambassadors, Premiers, Ministers, Mayors and Councils and professional colleagues. In the United States, he has been associated with EQE Engineering of San Francisco, with William L. Pereira Associates and with the McMahon Partnership in Los Angeles. In Japan he has been associated with the office of Raymond Tanabe Design of Tokyo and in France with Atelier Amenagement Architecture of Paris. In Italy he is associated with Gruppo Soges and with Mythos of Milan, as well as maintaining a close relationship with a number of Italian colleagues.

In addition to being a member of the Royal Architectural Institute of Canada, the Vancouver Board of Trade, the Terminal City Club, and having served the North Vancouver Chamber of Commerce, the West Vancouver Rotary Club, the Whistler Mountain Ski Club, and having chaired the Housing Committee and the Urban Design Panel Committee of the Architectural Institute of British Columbia, Mr. Oberti has been a member of the Development Committee of UBC Realty Inc. and a Director of the Italian Chamber of Commerce. Mr. Oberti is currently also a Member of Council of the Architectural Institute of British Columbia. Mr. Oberti is a Director of the Vancouver Foundation of Art, Justice and Liberty and a member of Lambda Alpha International, an honorary land economics society.



PHEIDIAS PROJECT MANAGEMENT CORPORATION

"Pheidias" takes its name and inspiration from the Greek architect and sculptor, Pheidias, who became a symbol of perfection in antiquity.

Pheidias Project Management Corporation has been providing development management services since its incorporation in 1976. In the field of construction, management services and coordination of multiple trade contracts are offered to owners, developers and general contractors as a substitute for a traditional single contract, achieving greater cost control, speed and flexibility. Professional project management is offered when a design professional firm such as ours is retained not only to design but especially to organize and carry a project through from the time of property selection and acquisition to substantial completion by the last construction contractor, and, during warranty periods, to monitor deficiencies and their rectification. The project management system by design professionals is explained in a paper that has been repeatedly selected for presentation at international conferences and professional organizations.

Pheidias has a wide-ranging international clientele, and has connections with and experience in international services reaching Europe, Japan, Hong Kong, China and the United States.

In addition to the management consultancy it provides in the fields of development, design and construction, Pheidias Project Management Corporation is at the head of a group that has been providing a wide variety of related services, often in conjunction with Oberto Oberti Architecture and Urban Design Inc. and with other consultants, that include the following areas:

- Planning
- Feasibility studies
- Selection of properties for investment
- Corporate management and services
- Real estate analysis
- Development process management and direction
- Project Certification
- Construction supervision/field services
- Construction management
- Cost analysis
- Cost control and reporting
- Development and construction contract documents
- Inspections
- Marketing analysis
- Marketing strategy
- Marketing management
- Advertising concepts

OBERTO OBERTI

ARCHITECTURE AND URBAN DESIGN INC.

"In fashion, culture and architecture there is a new search for roots, for meaning, for heritage, for a link with the past that gives a significance to the present."

Oberto Oberti
"Fashion and Architecture"

The company celebrates over a quarter century of work, and it can proudly look back at a unique record of accomplishments in innovative areas of architecture, planning and interior design.

It started in business pioneering the construction of luxury residential high rises in 1976 with Seawalk Place, near the urban centre of Ambleside, on the beach of West Vancouver. It was the first apartment building designed for a new urban life style, featuring higher ceilings, larger suites and elegant interiors, overcoming a real estate slump and creating a new market.

In 1981 it designed and built as construction manager the largest factory in British Columbia for that year, Tristar Industries, located in Tilbury Island industrial park.

In 1987, the company negotiated the first rezoning in the Downtown District of the City of Vancouver for a new concept of luxury living in the heart of the City, creating the first residential high rise on Georgia Street, and helping transform Vancouver in the vibrant city that we know today, integrating uses in the downtown and preventing the collapse of property values with the collapse of the office market. The project, Palais Georgia, was one of the most successful projects in downtown Vancouver, almost entirely pre-sold and establishing a record-selling price per square foot.



The architectural practice expanded with a multiplicity of projects, ranging from new industries to schools and churches. Its first church project was featured by the CBC for the Easter Mass, and it remains one of the favourite locations for weddings in the West side of Vancouver and of the North Shore.

Restoration projects, from Yaletown warehouses to the CIBC building at Granville and West Hastings in Vancouver, allowed the architectural practice to show its artistic understanding of the link between the present and the past, culminating in the City of Vancouver heritage award for the reconstruction of 698 West Hastings Street, in 1994.

New commercial projects across Canada achieved a crowning event with the opening of the new Henry Birks & Sons store at the corner of Bay and Bloor Streets in downtown Toronto in November 1999, and the restoration of the original Birks building at Phillips Square in Montreal in 2001.

Throughout these years the company maintained an important focus on all types of residential projects, from unique homes to resort projects, winning many awards. It was at the forefront of the development of Whistler, from the original land use contract for Twin Lakes in 1979, to the

JUMBO GLACIER RESORT – CONSULTANTS

first application at Village North (Twin Peaks Resort), and to one of the first condo hotels of Village North, the Pinnacle Hotel at Whistler, in 1996.

The company pioneered new mountain planning concepts since the 1980s, but the crowning achievement of a long series of innovative projects was the approval by the Premier of the Province of British Columbia, on March 7, 2000, of the plan for a new resort village of approximately 3500 beds west of Golden, B.C., Kicking Horse Mountain Resort, which started construction immediately afterwards and opened its doors to operations with its first phase on December 8, 2000. It is the first resort in the North American region of the Rocky Mountains designed around a dramatic access to a mountain top with one major gondola lift, equally attractive in summer for sightseeing and in winter for skiing.

This new ski and summer resort seems to epitomize the successful creativity and the ability to pull things together of our unique architectural, planning and design company.



Urban Systems Ltd.

Mr. David M. Ethier
Suite #200 – 286 St. Paul Street
Kamloops, BC V2C 6G4

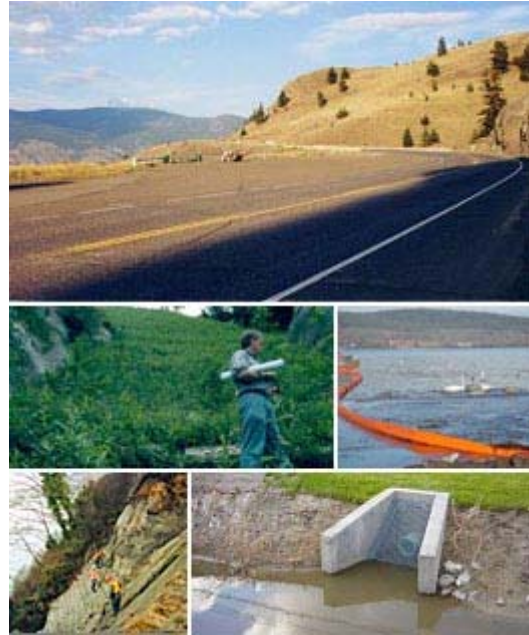
Our Services

To meet the differing and emerging needs of these many different clients, we have developed an integrated service offering that includes a blend of 4 inter-related elements:

1. Solid professional competencies in the disciplines of:
 - [Engineering](#)
 - [Planning](#)
 - [Landscape Architecture](#)

2. Specialized professional skills in the fields of:
 - [Transportation Planning and Engineering](#)
 - transportation and traffic safety plans
 - travel demand management
 - corridor management plans
 - urban roads and highway design
 - airport runway, taxiway and apron design
 - [Water Planning and Engineering](#)
 - safe drinking water
 - wastewater
 - storm water
 - [Local Government Consulting](#)
 - municipal infrastructure engineering
 - land use planning and growth management
 - service delivery and financing
 - asset / information management
 - [First Nations Consulting](#)
 - planning
 - housing
 - economic development
 - service delivery and financing
 - asset / information management
 - [Community Enhancement](#)
 - downtown revitalization
 - parks, greenways, waterfronts
 - entries, gateways
 - [Land Development](#)
 - planning, design, layout
 - site servicing
 - approvals

3. Problem solving and strategic thinking abilities
 - diagnosing and understanding problems
 - looking for innovative solutions
 - visioning, setting-direction
 - implementation strategies, action plans
 - project financing and cost recovery strategies
 - strategic servicing plans



JUMBO GLACIER RESORT – CONSULTANTS

- alternate service delivery through partnering – eg. Public Private Partnerships
- 4. Common Sense – finding solutions that achieve desired results because:
 - they fit the situation
 - they work
 - they are affordable

McElhanney Consulting Services Ltd.

Mr. Rob Parkinson
13160 – 88th Avenue
Surrey, BC V3W 3K3

McElhanney Consulting Services Ltd. provides consulting engineering, surveying, mapping and planning services in the fields of transportation, structures, land development, drainage, water supply and treatment, sewage treatment and disposal, and resource development.

The strength of our organization and staff and our commitment to excellence have enabled us to provide comprehensive services throughout Canada and in approximately 70 countries around the world.

Our philosophy is to provide consulting services that are distinguished by innovation, professional and technical excellence, and personalized service. We achieve this through our network of branch offices, which offer multi-disciplinary service and state-of-the-art technology.

McElhanney specializes in:

- Engineering
- GIS, Remote Sensing and Mapping
- Surveying
- Planning

We also provide extensive mapping, surveying and civil engineering services throughout the world including:



Engineering

- Transportation Planning
- Traffic Engineering
- Highways & Interchanges
- Bridges & Structures
- Airports
- Water Supply
- Sewerage
- Urban Beautification
- Street Improvements
- Land Development
- Storm Water Management
- Stream Restoration
- Watershed Planning
- Resource Access Roads
- Forest Road Deactivation
- Ski Resorts

Surveying

- Engineering Surveys
- Pipeline Surveys
- Mine & Tunnel Surveys
- Resource Access Road Location
- Construction Layout
- Building Space Inventories
- Geochemical Sample Surveys
- Telecommunications System Surveys
- Global Positioning System (GPS) Surveys
- Topographic & Hydrographic Surveys
- Machine Layout
- Land (cadastral) Surveys*

- Golf Courses
- Studies & Design
- Construction Supervision
- Design/Build

GIS and Mapping

- Digital Aerial Mapping
- Digital Orthophotography
- Geographic Information Systems (GIS)
- Remote Sensing
- Satellite Imagery
- Cadastral and Parcel Mapping
- Data Conversion and Structuring
- Utility and Infrastructure Mapping
- Internet/Web-based Mapping
- Map Sales
- GIS Website Programming
- Software Development



Planning

- Community and Neighbourhood Plans
- By-law Preparation
- Rezoning and Subdivision Processing
- Subdivision Planning
- Mapping/GIS Databases
- Drainage and Flood Planning
- Traffic and Access Planning
- Impact Assessments
- Approvals, Permitting, and Public Consultation

Lynnpeaks Consulting Ltd.

Mr. Brian J. Wills

Suite # 60 – 1550 Larkhall Crescent

North Vancouver, BC V7H 2Z2

Brian Wills, CMC

Brian Wills is President of Lynnpeaks Consulting Ltd. and is a Certified Management Consultant(CMC). He has 20 years of experience in management consulting in the ski industry.



EXPERIENCE IN THE SKI INDUSTRY

Brian has conducted market analysis, business plans, financing plans, valuations, loan assessments and turnaround plans for ski areas across British Columbia and Alberta including Red Mountain, Mt. Seymour, Hemlock Valley, Kimberley, Kicking Horse Mountain, Fernie, Rabbit Hill, Silver Star, Blackcomb/Whistler, Sunshine Village and Skiing Louise. He has reviewed the feasibility of proposed new ski areas including Garibaldi at Squamish and Cayoosh near Lillooet. He provides ski area assessments for lenders to evaluate loan positions and make recommendations on improvements to the financial position of the ski area. He recently completed a valuation of Big White and Silver Star Mountain resorts.

He worked in the past with Mt. Seymour on developing a cross country ski trail network and is an active cross country skier. In 1990, he conducted the Proposal Call for development of the Callaghan Valley for the Ministry of Crown Lands and recently completed a study on the Post Olympic Use of the Whistler Nordic Facilities in the Callaghan Valley for the Vancouver 2010 Bid Corporation.

He is currently active in resort real estate development and responsible for several successful new projects at Kicking Horse Mountain Resort including townhomes, a multi-family stacked product and single family home subdivisions.

Litigation support services and expert testimony were provided for legal actions pertaining to Apex Mountain Resort, Blackcomb Lodge, Mountainside Lodge, Cypress Bowl and Hemlock Valley.

EDUCATION

Brian holds the following degrees: Bachelor of Science—Physics, University of British Columbia, 1970; Licentiate in Accounting—University of British Columbia, 1976.

PROFESSIONAL QUALIFICATIONS

Brian joined the Institute of Certified Management Consultants of British Columbia in 1982 and completed course work to receive the designation Certified Management Consultant (CMC) in 1984.

JUMBO GLACIER RESORT – CONSULTANTS

He is the Past President of the Institute of Management Consultants of British Columbia. Brian is an Associate member of Canada West Ski Areas Association and has been a featured speaker on the subject of financially troubled ski areas. He is a past President of Mountain Equipment Coop.

Milne Consulting
Management, Planning, Development & Research

Mr. Dave Milne

Box 384

Invermere, BC V0A 1K0

**Management
Planning**

Strategic and Business Planning

- Develop well-documented business plans
- Formulate action plans
- Help set short term, long term goals
- Have designed our own Business Planning Model

H R Planning

- Effectively assess employee needs and skills
- Designed our own Satellite Model of Human Resource Planning
- Develop HR Systems and structures
- Provide career planning

Marketing

- Planning
- Research
- Implementation

Management Development

Leadership

- Consulting
- Coaching
- Myers-Briggs Type Indicator [MBTI]

Facilitation

- Meetings
- Planning sessions
- Conferences
- Focus groups

Team Building

Challenger Corporate Team Building program

Custom designed programs

MBTI

Training

We design, develop and deliver customized programs in the above areas as well as:

- Customer service
- Supervisory skills
- Interviewing skills
- Entrepreneurship
- Career Planning
- Job Search

Golder Associates Ltd.

Mr. Michael Maxwell

Mr. R.C. Butler

Suite # 500 – 4260 Still Creek Drive

Burnaby, BC V5C 6C6

Golder Associates is an international group of consulting companies that provides professional services in engineering and environmental sciences for all aspects of mining. Golder Associates Ltd., the Canadian company and the founding member of the worldwide group of companies, has been providing services since 1960.

PROFILE

In 1960, H.Q. Golder and Associates Ltd. began offering specialized services in

geotechnical engineering. Since then, Golder Associates has grown to become one

of the largest privately held engineering and environmental science consulting

companies in the world — owned entirely by employees. We have offices in Asia

Pacific, Australia, Europe, North America and South America, and we provide

practical solutions to meet the needs of clients in more than 140 countries.



Golder offers a wide range of specialized services in earth engineering and

environmental sciences. We also provide integrated service packages where we

assemble multidisciplinary teams to handle various phases of our clients' larger projects.

ENGINEERS AND
ENVIRONMENTAL SCIENTISTS

BRIGHT MINDS

Creative thinking built on a broad foundation of expertise and experience. That's how we provide innovative and cost-effective solutions.



GEOTECHNICAL ENGINEERS
EARTH SCIENTISTS

You have an earth-related issue. Maybe it's complex. Maybe it's not. Bright, practical people can tell the difference. These are the people who work for Golder – people who can find solutions appropriate for your situation.

You expect professional and timely results. At Golder, we have professionals who are recognized around the world for their pursuit of excellence.

You may need diversity. Today, engineers and scientists alone are not enough in many situations. You may require a multidisciplinary approach sensitive not only to technical and environmental issues, but also to corporate and social concerns.

RISK MANAGERS
HYDROGEOLOGISTS





At Golder, we have the resources to assemble world-class, multidisciplinary teams that may include engineers, environmental specialists and scientists. Many of our professionals live in your community and understand your local issues, but we can also draw from our experts around the world who have a broad range of international experience. The Golder team is international, inter-disciplinary and inter-connected.

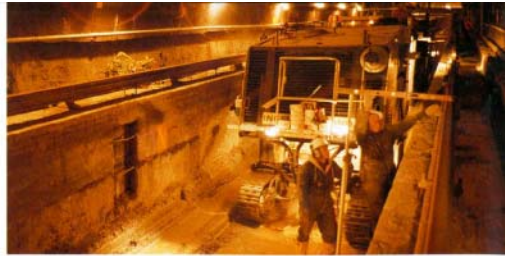
ENVIRONMENTAL SCIENTISTS

Because Golder is employee-owned, the pride of ownership is reflected in the quality of our work. We know our success depends on your success, so we approach every project with a strong sense of partnership. As a Golder client, you can expect the same personal commitment you might expect from the owner of the company.

After all, that's likely who you'll be dealing with.

INFORMATION MANAGERS
MINING ENGINEERS

GEOTECHNICAL ASSESSMENT AND DESIGN FOR A RAIL TUNNEL UNDER THE ST. CLAIR RIVER IN CANADA



HAZARDOUS WASTE SAMPLING IN SWEDEN



We are one of the world's largest employee-owned engineering and earth science companies.

STATISTICS

40 YEARS EXPERIENCE

80 OFFICES WORLDWIDE

140 COUNTRIES (COMPLETED PROJECTS)

1,900 EMPLOYEES

11,000 PROJECTS PER YEAR

ENVIRONMENTAL INSPECTION FOR A NATURAL GAS PIPELINE IN THE UNITED STATES

Whether you need highly specialized services or a customized package of services, Golder can deliver solutions to meet your diverse needs.

MAJOR SPECIALIZED SERVICES

- Geotechnical engineering
- Mining engineering
- Hydrogeology
- Hydrology
- Geosciences
- Risk and decision analysis
- Biological sciences
- Construction quality assurance
- Cultural sciences
- Air quality
- Information management

CLIENTS SERVICES

- MINING
- LAND DEVELOPMENT / CONSTRUCTION
- TRANSPORTATION
- MANUFACTURING
- OIL AND GAS
- PUBLIC SECTOR
- LEGAL / FINANCIAL INSTITUTIONS
- POWER
- WASTE MANAGEMENT
- FORESTRY / AGRICULTURE
- WATER RESOURCES

- Infrastructure development – transportation, land, water resources
- Environmental assessment and permitting
- Environmental liability assessment
- Contaminated lands restoration
- Mine waste management
- Solid and hazardous waste management
- Nuclear repository assessment and permitting
- Site reclamation and closure

INTEGRATED SERVICE PACKAGES



PUBLIC SECTOR

Much of our knowledge and skills are transferable from project to project, field to field, country to country.

In dealing with local, regional or national administrative bodies, our teams of specialists provide practical and realistic advice. From developing risk assessment guidelines, providing external review services, or managing engineering and environmental needs, we work to find appropriate solutions for the public sector, as we do for private business.

WE SPEAK YOUR LANGUAGE

WORLDWIDE

Whether your company is local or international, we can be wherever you need us, whenever you need us. We have established offices throughout the world, and we are mobile. We have the ability to put together a project team and move it into place on short notice.

We have consultants who live in your community, understand your local issues and customs, and speak your language. We are also international, so we understand many of the issues faced by global clients.

POWER

Whether it's hydro, thermal, nuclear, cogeneration or distribution, we have solutions – from the design of a hydro-electric dam, nuclear repository, pumped storage scheme or fuel supply pipeline to expert advice on waste management, air quality or fisheries issues.

FORESTRY AND AGRICULTURE

Golder has participated in siting of a pulp mill, assessing impacts of harvesting, designing environmental management systems for integrated forestry companies, providing waste management solutions for agricultural producers, and assessing food safety. These all require a team of professionals who understand your industry. We do.

LEGAL AND FINANCIAL INSTITUTIONS

We can help you make decisions to manage risk. We provide geotechnical and environmental counsel to give you the accurate information you need – from land transactions to liability claims to property valuations.

MINING

We provide solutions. From underground to open pit mining, from the North Pole to the South Pole, for 40 years Golder's mining staff have assisted in engineering design and implementation, as well as environmental permitting of new developments, operations optimization, integrated mine waste management to mine reclamation and closure.

TRANSPORTATION & LAND DEVELOPMENT

Golder has participated in developing highways in the Middle East, ports in South America, dams in Asia, foundations for high-rise buildings in Australia, sewers in the Caribbean, tunnels in Sweden, railroads in the U.S. and bridges in Canada. Wherever you want to connect people or improve their environment, we can help find responsible ways to engineer the earth.

MANUFACTURING

Our worldwide network of professionals can provide practical solutions to your industrial challenges – including acquisitions, expansion, site selection, environmental management systems, emergency response plans and divestitures. We know your business. We understand your global issues. We can help you manage risk.



OIL AND GAS

Projects include refineries in the Caribbean, well sites on the Canadian Prairies, service stations in Europe, offshore oil platforms in the North Sea and pipelines in North America. Virtually anywhere in the world, whether your focus is upstream or downstream, we can help you manage environmental and earth engineering risks.

WASTE MANAGEMENT

Golder understands waste problems. We provide realistic solutions for siting, design, permitting, planning and feasibility studies, construction quality assurance, operations and closure for both public and private waste management organizations around the world.

WATER RESOURCES

From the U.S. to China, above ground and below, we help organizations manage both the quantity and quality of water systems, including flood control, water supply, dams, irrigation, drainage and erosion control.

If your development project is large or small, straight-forward or complex, Golder can help you find practical and cost-effective solutions. We can customize service packages to suit your particular problem, your particular industry.

DOWN TO EARTH

WE SOLVE PROBLEMS OF THE EARTH'S



CANADA

The 13-kilometre Confederation Bridge built in the waters of the Northumberland Strait demonstrates Golder's experience in foundation design.



SOUTH AMERICA

The expertise we provided for the reclamation and closure of a mine waste disposal site in Brazil helped minimize environmental issues and ensure the site was in harmony with the surrounding landscape.



EUROPE

Golder played a leading role in this regeneration project in Italy. We managed the demolition and remediation work necessary to transform an abandoned 19th Century gas manufacturing plant into part of a university campus.

UMA Engineering Ltd.

Mr. George Giles
Suite # 200 – 415 Gorge Road, East
Victoria, BC V8T 2W1



UMA provides **consulting, engineering, construction and management services** to the community infrastructure, earth and water, transportation, and industrial market sectors.

Consulting

The early stages of a project often determine its success. UMA's established relationships with public and private clients and our knowledge of regulatory procedures are especially valuable in the environmental and regulatory reviews that precede project approval.

In addition to studies, conceptual and detailed planning, surveying, cost estimating, and design development, UMA brings extensive experience in public consultation – working with stakeholder groups whose needs and interests vary.

Engineering

For many years UMA's strength in traditional design engineering disciplines has been widely recognized by our clients. Our experience and abilities address a broad spectrum that includes civil, structural, mechanical, electrical and instrumentation design. We have also developed niche skills in, for examples, Arctic engineering, hydrocarbon recovery, engineered wood products, irrigation, underground services renovations, and intermodal facilities.

Management

Today's industry leaders expect more from their management service providers than the traditional mantra of "on time and on budget." UMA's management services teams build relationships to deliver smart solutions that assist clients in attaining their strategic project goals. Our clients have come to expect value added solutions and innovative ideas that not only deliver on time and on budget, but also solve problems to improve their competitive advantage.

For more than 30 years, UMA has provided specialist management services to organize and manage projects from the feasibility and planning phase through the project delivery phase and on into facility operations and maintenance. Our strength is our ability to:

- Work collaboratively while implementing multi-year projects.
- Manage projects with complex and sensitive organizational structures and cultures
- Manage projects involving specialized or leading-edge systems with exacting tolerances
- Successfully complete projects with critical delivery factors of time, cost, performance and quality.

Program, Project & Construction Management

UMA's experienced program, project and construction managers help clients to organize, schedule and coordinate all of the tasks involved to complete projects successfully.

Asset Management

UMA combines engineering principles with sound business practices and economic rationale to assist clients to develop systematic processes to operate, maintain, and upgrade their physical assets cost-effectively.

Technology Systems

UMA applies our historical knowledge and powerful new technology tools to produce, manage and deliver digital information and solutions that support the management of infrastructure assets.

AGRA Earth & Environmental Limited
Engineering Global Solutions

Mr. D. S. McKinley
Suite 221 – 18th Street, S.E.
Calgary, Alberta T2E 6J5

**Environmental & Geotechnical
Consulting**

Application Areas

- Stewardship, monitoring, information processing, recycling
- Hazardous (special) waste management
- Solids waste management
- Laboratory analysis; laboratory services
- Soil reclamation; soil remediation
- Air monitoring
- Other - environmental management (EMS, ISO, audits, assessments)

ENKON Environmental Limited

Mr. Glenn Stewart
Unit 201 – 2430 King George Highway
Surrey, BC V4P 1H8

ENKON Environmental Limited (ENKON) provides expert environmental management consulting services to government and private sector clients. We specialize in assisting companies through the BC and Canadian environmental assessment processes (BCEAA and CEAA), plus provide general regulatory permitting and environmental assessment and consulting services. The ENKON team is comprised of highly trained and experienced consultants. Our team, provides the following services:

Environmental impact assessments:

- Establish baseline conditions and conduct resource inventories
- Identify impact sources and characteristics
- Describe and/or quantify environmental impacts
- Develop mitigation/compensation strategies



Fisheries assessments:

- Population surveys
- Biophysical watershed inventory
- Habitat mitigation/compensation plans
- Construction monitoring

Aquatic resource assessments:

- In-situ water quality
- Benthic invertebrate studies
- Effluent toxicity testing

Wildlife and vegetation surveys:

- Vegetation and terrestrial ecosystem mapping
- Wildlife inventories
- Impact assessments

Aerial photo interpretation:

- Assess stream gradients
- Vegetation identification
- Drainage locations

Environmental management planning:

- Sampling parameters and conditions
- Environmental monitor terms of reference
- Contractor specifications
- Construction monitoring

Regulatory Process Coordination and Approvals:

- Government liaison
- Preparation of Applications for Project Approval Certificates under the BCEAA
- Negotiation of environmental permit terms and conditions
- Preparation of comprehensive studies under CEAA
- Air, effluent and refuse permit applications
- Oil and Gas Commission (OGC) permitting



Public and First Nations consultation:

- Develop public consultation plans
- Undertake First Nations consultations
- Prepare brochures and presentation material
- Coordinate open house activities
- Design and administer mail outs and advertisements
- Create Public Information Websites

Socio-economic assessment:

- Socio-economic profiling
- Social impact analysis
- Economic impact analysis

Chris Stethem & Associates Ltd.

Mr. Chris Stethem

Mr. Peter Schaerer

Suite # 408 – 8th Avenue

Canmore, Alberta T1W 2E6

Avalanche Consulting

AMS is partnered with Chris Stethem & Associates Ltd. Niko Weis is the company's coastal forest industry avalanche safety consultant based in Courtenay, BC. Stethem and Associates Ltd. Snow Services provide planning and operations expertise for avalanche protection, snow management and mountain safety. Stethem & Associates was incorporated in Whistler, British Columbia in 1979 and is currently registered in British Columbia and Alberta. Over the years, we have helped a variety of private and public sector clients in North and South America as well as overseas.

Each project undertaken is somewhat unique. The uniqueness is partly a result of diverse mountain environments and partly a result of the special requirements of each client. In general however, project requirements usually fall within the following areas:

- Terrain analysis
- Investigation
- General mountain safety operations in alpine terrain
- Snow safety program reviews/avalanche hazard mapping
- Snow climate studies
- Assessment of avalanche hazard (risk analysis) and the feasibility of avalanche control
- Design of avalanche protection systems and preparation of operational snow safety plans
- Contract snow safety operations
- Explosive avalanche control applications, research and design
- Snow stability evaluation and snow research
- Training courses in avalanche protection
- Operations facilitation in mountain environments
- Snow management studies & facilitation
- Avalanche accident investigation

Our team of AMS and Stethem & Associates can provide full professional avalanche services.

URS Canada (formerly Norecol Environmental Consultants Ltd.)

Mr. Douglas Whitarcar
Suite # 700 – 1090 West Pender Street
Vancouver, BC V6E 2N7

We are a global, full-service organization, more than 25,500 strong.

- The industry's finest planners, engineers, architects, scientists and program and construction managers make up our professional staff.
- Our broad-based expertise is a valued resource for federal, state and local agencies as well as private clients in the chemical, manufacturing, pharmaceutical, forest products, mining, oil and gas and utilities industries.
- We serve our clients' needs from 300 offices in more than 20 countries.



Planning and Design

- We develop and improve the transportation systems and infrastructure on which society depends.
- We produce high-quality designs for buildings and facilities that keep pace with the needs of a new century.
- We provide environmental solutions that restore ecosystems and protect the earth's resources.

Construction Services

- We apply proactive and proven program and construction management techniques to meet quality, schedule and cost objectives.
- We bring the value of practical experience in planning, design, and program and construction management to dispute resolution.
- We provide demolition and remedial contracting solutions for all phases of site decommissioning.