PHILIP J. WHELAN CEO, Wolf Park Consulting Corp. Calgary, Alberta T: 416.484.8348 E: philipjameswhelan@gmail.com

Philip Whelan is an independent capital project consultant and IPD Lean practitioner with more than 30 years of International and North American experience in construction management and execution of large capital projects and programs in commercial, industrial, power generation and T&D. An experienced professional in developing and profitably managing business divisions and mega projects for owners, EPCs and constructor organizations providing team building, leadership, executive management, business development, strategic planning, and contract negotiations expertise. A senior executive who has held various leadership positions of increasing responsibility throughout his career, bringing focused leadership and team management to each role and opportunity.

Philip Whelan Relevant Professional Experience

PTAG General Manager 2022 - Present

General Manager and Collaborative Contracting Industrial Integrated Project Delivery (I2PD) Subject Matter Expert working with both public and private sector clients coaching, facilitating, training and developing Multi Party Agreements for individual projects/programs. Project Management Advisory and Process Improvement support reviewing project requirements and organizational capabilities. Provide advice and process to Owners with vendor selection. Work with Integrated Teams with scope development and Front-End Planning to produce an Integrated Schedule and Estimate where all suppliers would be willing to put their profits at risk in return for participation in any savings. Develop engineering specifications with Owner and non-Owner parties, provide support in the development of detailed Construction, HSSE, Quality Plans, Project Controls, Commissioning and Return to Service Plans. Clients include: ITER Fusion reactor, OPG, Exxon Mobile, Transcanada, CNL

PWC Program Director 2021-2022

PwC has been contracted to support the Province of British Columbia with its response to the Atmospheric River event that affected areas of British Columbia in November / December 2021.

Served as Program Director for the Province of British Columbia to support the implementation of various workstreams. The workstreams support the work of ENV's Department Operations Centre (the "DOC") that was activated to Level 3 in December 2021, as well as the new Debris Management Secretariat (the "Secretariat").

Responsible for key relationships between BC Government and PWC, 54 First nation Bands, trades group and legislative bodies FLNRO, DFO, ISC, EMBC, MOTI and Archeology branch

PWC Program Director for the Atmospheric River Recovery Program Our role with the province includes:

- Human made debris.
- Natural debris that poses imminent threat to public safety
- Sediment that poses imminent threat to public safety
- slope stability
- damaged infrastructure or infrastructure at risk
- dikes, dams, and berms
- shoreline reinforcement
- Natural debris and other sediment issues that do not pose an imminent threat to public safety.
- 1. Local authority and First Nations Atmospheric River assessment
 - Reach out to each of the local authorities and First Nations to assess the environmental situation and flood impacts.
 - Work with local authorities and First Nations to address their needs_and agree to their involvement in projects.
 Provide tracking of local authorities and First Nations requests and concerns for reporting to ENV and other ministries of the province
 - Ratify communication protocols between ENV, other ministries of the province, local authorities, and First Nations
- 2. Program management of the debris and waste removal

- Develop a framework to guide the overall debris assessment and removal.
- Identify and prioritize debris for removal including human made and natural debris.
- Prepare a comprehensive assessment of the debris in the waterways.
 Remove debris from waterways and dispose of waste_through structured project planning.
 Liaise with stakeholders in project procurement and execution and cooperate with members of other workstreams.
- Oversee project completion and report to DOC/Secretariat
- Coordinate activities and permitting with FLNRO, DFO, BC Archeology branch, MOE, MOTI, and ISC

Burns & McDonnell – 2019-2022

Canadian Lead, Construction, Engineering, Field Services, Environmental, Safety Teams

• Responsible for developing and executing strategies to generate new business lines and grow revenue.

Canadian Program Director, New Gold Inc, New Afton Mine, Zone C Burns & McDonnell – 2020-2022

- Program Director at New Afton site for Major Capital projects that included C Zone, TAT, Stabilization and B Zone; Reported directly to Board of Directors and Executive Team
- This project was awarded as a result of a "Maturity Assessment" provided to the Board in May 2020, identifying
 project control areas of improvement, which led to the award of Program Consulting Services on the first Mining job
 in Canada for Burns & McDonnell. The C-Zone Program included four projects including: expanding the underground
 block cave mine (1,800m of vertical development), mine infrastructure (including classifiers and conveyors), building
 the largest column thickener in North America (45m diameter) for thickened and amended tailings management
 system, and tailings stabilization.
- The Project Control team reconfigured the P6 environment, rebuilt and integrated their program schedule, reconfigured all cost methodology and reconfigured cost reporting structure to align to schedule, and set-up Prism G2 for cost and earned value management. The integration included connection to SAP, and to P6 for key schedule data dates, progress % and with the help of BMI 1898 created Power BI reporting to automate the integrated process.

Canadian Senior Program Director, Canada/USA Burns & McDonnell - 2016-2020

- Responsible for full scope of client account including team management and all program/project management aspects including safety, environmental, engineering project management, project controls and construction management.
- Actively Managed the engineering, design, procurement, and construction of numerous transmission & distribution facilities as well as the development of numerous HVDC projects as Owners Engineer.
- Developed and led a PMO for 20 + individual projects with a total value of more than \$1 billion+ project portfolio.
- Created interconnection processes and procedures for multiple utilities in North America using collaborative contracting techniques.

Consultant - Worley Parsons - 2015-2016

- Contracted to work on OPG nuclear bids and develop a construction management division for the Power Division including the development of a 5-year strategic plan with supporting P&L targets.
- Mandated to increase business performance, developed KPI's to measure and communicate cost, schedule, and performance; measure and communicate trends CPI's, SPI's, earned value etc.; measured and communicate HSE goals and trends, productivity metrics across all functions particularly with craft and engineering; measure quality and regulatory adherence.
- Directed contract work at NB Power
- Consulted on the acquisition of Atlantic Nuclear Services

- Reported to the President of the Power Group, establish a new Construction and Construction management Division with reach across all divisions of Power Group
- The role had overall responsibility for the Power Construction Division including project delivery in Nuclear, CANDU, Transmission & Distribution, Telecommunications, Hydroelectric, Thermal and Fossil power plants sectors.
- Build an effective Power construction division, being the leader of operational excellence of the organization, including maintaining a high level of safety accountability as part of the company's culture.
- Oversight of Front-End Planning, Rapid Assessment of failing projects, contracting strategies, Project Management Information Systems to cover Safety, Quality, Document Control, Front End Engineering Design, Commissioning, Estimating, Commissioning, and turnover.
- Accountable to develop and implement the construction strategy across Power for various projects and assign subject matter experts and resources accordingly.
- Oversee Design and Constructability Reviews
- Direct and coordinate the work of technical team members including engineers and consultants in the preparation of studies, designs, plans, and specifications.
- Manage high level client relationships.
- Responsible for overall project performance ensuring compliance and adherence of all HSE regulations, quality standards and Code of Ethics Business Conduct
- Maintain excellent working relationships with internal stakeholders, the management team, and contractors/clients.
- Establish and implement improvements to existing strategies, systems, methods, and procedures
- As Senior Project Director managed the execution of a HVDC transmission line (WATL) which at the time constituted the largest project to date of its kind in Canada. The project included the construction of two HVD converter stations, five A/C substations and 347KM of 500KVDCtransmission lines.
- Administer and directed Siemens subcontract for HVDC converter stations and grid synchronization project execution.

Board Member - SNC LAVALIN (Hydro West) - 2013-2015

- ASL Joint Venture Management Committee Co-Chair with Signing authority for project representing SNC Lavalin on the Waneta Expansion Project, a \$1 Billion initiative.
- Project included a design build facility with a 2 unit, 335MW capacity Power Plant

Constructors Pacific, Site Director, John Hart GS - SNC LAVALIN - 2014-2015

- Responsible for leading and coordinating the owners engineer consortium site supervision and design review and advising the owner on all matters concerning contract administration and site supervision, application design, construction procedures etc.
- Interface with BC Hydro executive team with project signing authority.
- The \$1B, 132 MW facility involved a new underground tunnel and generating station, removal of 3 penstocks and the existing station to reduce the site environmental footprint.

Global Senior Director, Construction and Program Management T&D - SNC LAVALIN - 2012-2013

- Accountable for major Transmission & Distribution construction projects globally
- Provided leadership for all activities related to the execution of construction work including contract administration, quality control, planning and cost control, materials management, office management, labor relations, security, and safety and accident prevention.
- Oversight of front-end planning, rapid assessment of failing projects, contracting strategies, project management information systems to cover safety, quality, document control, front end engineering design, decommissioning, estimating, commissioning, and turnover.
- Management of the AltaLink portfolio of projects valued at more than \$5B (over three years) encompassing 95 separate projects ranging in value from \$10M to over \$2B each.
- These transmission projects involve engineering, construction, and commissioning, along with supply of 50 substations.

- Co-founded and led this business from its inception, developed it into a leading service provider (construction and maintenance) in the nuclear power generation sector in Eastern Canada
- Oversight of all aspects of company operations including client/business development, service delivery, staff development, quality and financial (P&L) management
- Developed initial business plan, hired and trained multi-trade/disciplinary team of 46 managers and staff.
- Secured contracts with major clients that have included:
 - Construction of \$650 million Maple 1 & Maple 2 nuclear research/isotope reactors for AECL
 - \$10 million/year MSA with AECL to deliver repairs to AECL Chalk River NRU isotope reactor and support facilities.
- Awarded Hydro One MSA for EPC work in transmission distribution and telecommunications.
- Conceived, developed, and introduced new technology for tracking and reporting costs that doubled field productivity and provided a competitive advantage to Plan Energy in the marketplace.
- Oversight of Front-End Planning, Rapid Assessment of failing projects, contracting strategies, Project Management Information Systems to cover Safety, Quality, Document Control, Front End Engineering Design, Commissioning, Estimating, Commissioning, and turnover.
- Awarded numerous projects at Bruce Power in the reactor building and reactor auxiliary bay.

Project Developer, Account Executive - PLAN GROUP - 2005-2006

- Reporting to the President of Plan Group, was accountable for developing, managing, and delivering service contracts for major clients across Canada.
- Managed portfolio of client relationships including proposal development, contract negotiation, service delivery, subcontractor engagement, purchasing key equipment and overseeing all site management/construction
- Managed electrical/mechanical and security projects for 407 ETR, MDS Labs, Government data centers.
- Major client project portfolio included the GTAA (Greater Toronto Airport Authority):
 - New Terminal 1Piers D&E
 - Refurbishment of terminal 3
 - Campus telecommunication contracts, data center and data hub's refurbishment

Senior Vice President of Operations - 401 ENERGY AND WIND DANCER ENERGY - 2001-2005

- Co-founder of this company and ongoing role as key member of management team
- Melancton Wind Farm, 100 MW, one of Ontario's largest wind farm developments
- Planned 400 MW wind farm located in Northern Ontario
- Develop agreements with landowners, OPG and Hydro One
- Investigate and plan connections into power transmission and distribution system.
- Prepare budgets and estimates for presentation to project lenders.
- Manage agreements with consultants and contractors.
- Liaise with First Nation organizations, elected officials and other stakeholder groups as required.

Operations Manager Power, T&D - COMSTOCK CANADA INC. - 2000-2005

- Developed and managed Energy Services and Infrastructure Division, T&D and Telecommunications of Comstock, a multi trade Canadian contracting company.
- Construction Manager of CANEC (Comstock and Stone & Webster) refurbishment of Pickering NGS Unit 4 CANDU reactor
- Implemented and oversaw EPC projects and valve program at Bruce Power Nuclear stations (BNGS)
- Overall responsibility for all business development, planning, project management and company operations
- Notable accomplishments include:
 - Awarded OPG Draw Down Agreement that resulted in \$75 million revenue.
 - Secured MSA Agreements with OPG Nuclear, Bruce Power and AECL (\$100 million annual revenue)
 - Managed Portland's Energy Centre build of a 550 MW combined cycle power generating station
 - Great Lakes Power transmission contract (\$130M)
 - Developed runner replacement program at OPG hydro dam facilities.

Contract Facilities Manager Infrastructure/T&D Operations Manager -AINSWORTH INC. - 1998-2000

- Managed all aspects of the contract process: writing and reviewing of all service contacts; estimating industrial contracts up to the \$2 million range; contract negotiations; initiated "meet and deal" meetings, led discussions and created solutions.
- Grew the business offering to include power systems, predictive maintenance, motor maintenance, drive maintenance, thermography to industrial, commercial, and institutional clientele.
- Member of the Management Strategic Planning Team
- Developed partnership with MEUs for the provision of distribution and value-added energy services.
- Prepared cost estimates and bid proposals, ensured ISO compliance and oversight of all project scheduling.
- Provided health and safety guidance and internal training for the division. Manage daily operations, monthly and yearly forecasts.
- Prepared cost estimates and bid proposals, ensured ISO compliance and oversight of all project scheduling.

Senior Project Manager - MEYN INC., Holland - 1995-1998

- Responsible for the overall management and EPC installation of new plant projects including the planning and coordination of all external contractor work.
- Organized the construction and commissioning of water treatment and food process systems throughout the Americas, Europe, and Middle East.

Senior Project Manager, Electrical, Telecommunications - DILLINGHAM/ABB SUSA, Egypt - 1993-1995

PEACE VECTOR III, IV

- Supervised 400 locals and expatriate's contractors during the mobilization and construction phases of this US military air force base project.
- Project included construction of the base powerhouse, avionics buildings, aircraft hangar, state of the art data center, elevated water storage tanks, water treatment facilities, 7 ½ miles of underground duct banks, and fiber optic communication systems; 350 km of 500kv transmission line and fiber optic communication systems.
- Managed all telecommunications installations and telecom hubs to support the base facilities.
- Primary responsibilities included hiring and supervision of trade and engineering personnel, preparing activity schedules, bid proposals, cost estimates, material listings, purchase orders, construction activities, scheduling and inspection.
- Project updates, review of shop drawings for DOD & COE submittals and engineered change notices.
- Other duties included acting as logistics liaison between architects, engineers, subcontractors, and US army corps of Engineers at both the US and Foreign Military locations.

Senior Project Manager - ONTARIO HYDRO - 1982-1993

- Senior PM commissioning and testing for Pickering B units 5-8 on CANDU reactors
- Considered an expert in Fuel Handling design, remote robotics and fuel channel replacement tooling.
- Seconded to AECL Sheridan Park form short periods of time to help with design, creation and development of procedure for Fueling machines, fuel transfer machine and fuel channel replacement.