# Malli Aulakh, P.Eng.

### Mechanical Lead

#### **EMPLOYMENT HISTORY**

A Designs Inc., Edmonton 2018 to Present

Consultant (Mechanical)

**MVEC and LKG Engineering Consultants** 1990 to Present

Consultant

City of Winkler, Manitoba 2015

Director, Planning and Engineering

**Government of Manitoba** 

2013 to 2015

Capital Works Engineer

Government of Nunavut, Rankin

2010 to 2012

Senior Project Officer

City of Winnipeg, MB

2009 to 2010

Section Head/Plan Examination Mechanical Engineer

**Government of Nunavut, Iqaluit** 

2007 to 2009

Senior Manager, Infrastructure

**LKG Engineering Consultants, Winnipeg** 

2002 to 2007

President

**NRG Management, Winnipeg** 

2001 to 2002

**Project Manager** 

Rural Municipality of Springfield, Oak Bank

1999 to 2000

Manager, Public Works and Engineering

Agricore, Winnipeg

1999

Coordinator, Repairs and Maintenance

Department of Public Works and Services, Government of Northwest Territories, Iqaluit

1989 to 1995

Regional Manager of Engineering

Red River Community College, Winnipeg

1986 to 1988

Lecturer, Power Engineering

University of Manitoba, Winnipeg

1986 to 1988

Post Graduate student with NSERC Fellowship

Industrial Technology Centre/Manitoba Research council

1983 to 1986

Mechanical Engineer

**Chicago Blower Canada Limited, Winnipeg** 

1980 to 1983

Mechanical Engineer

## **EDUCATION**

Ph.D. Industrial Engineering

University of Manitoba, (finished two years)

M.Sc. Engineering

University of Manitoba, Winnipeg

Power Engineer, Second Class (finished all the papers (covers facility management)



## **Career Highlights and Expertise**

Malli is a highly qualified professional engineer with extensive experience in the industry spanning over four decades. His diverse experience includes over four years of work with the Government of Nunavut (GN) at different times and at different positions.

As a Senior Project Officer with the GN, Malli helped in developing and implementing asset management strategies, processes, and tools, and conducting research. He assisted in the development of lifecycle costing of assets, renewals, and replacement strategies. Some of his key responsibilities included overall management of capital and O&M, and technically complex projects, including delivering a strategy to complete all project, management of contracts, ensuring adherence to approved scopes of work, budgets and schedules. In a separate role as Senior Manager, Infrastructure with the GN, Malli reviewed drawings for Code Compliance (NBC, NFPA, ASHRAE Standards, Plumbing Codes, Fire codes, Electrical Codes, National Energy Codes etc.), and developed and implemented asset management strategies, processes, and tools. He developed and implemented long terms (20 years) need assessment plans throughout the territory for each community for their Infrastructure needs. He was responsible to ensure the capital plans were physically, technically, financially, and logistically feasible and coordinated with capital projects proposed by the other departments, agencies, and stakeholders.

Malli have had the responsibility of coordination with mayors and councils throughout 25 Communities of Nunavut to develop 20 years' needs for their Infrastructures. He has had the responsibility of ensuring the Water Board and other regulatory authorities (INAC, DOE, EC, DFO, NPC, Wildlife Act, NIRB, NLCA and NWSRTA) regulations and conditions are met to maintain communities Water Board License. He was responsible for developing five years capital and business plans, and the responsibility of waste water systems and solid waste management system. Malli was member of CCME to represent Government of Nunavut to develop Canada wide standards and guidelines.

### **Relevant Project Experience**

Construction and Renovation of City of Thompson's Leased Building by RCMP c/w Rifle Range – Construction Value: \$6.5m

**Role:** Project Manager **Scope:** The project was finished on schedule and within allocated budget. The meetings were conducted with Government Canada Public Works Department. Malli coordinated every activity to ensure minimum interruption to the staff. This was done without relocating the staff. The project was delivered from initiation, Planning, Implementation, Performance and Monitoring, and closing. He developed terms of reference, preventive maintenance program for buildings and cost analysis techniques.

### Renovation of Old treatment Plant: Construction Value: \$3.5m

**Role:** Project Manager, **Scope:** The renovation of old Treatment Plant was to convert to multi-purpose complex. Malli prepared the RFP to develop a scope of work and terms of reference. He chaired the on-site meetings to provide answers to potential bidders.

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### Construction of New Waste Water Treatment Plant: Construction Cost: \$5m

**Role:** Project Manager, **Scope:** Malli developed a scope of work/concept for a new sewer treatment plant c/w capacity of distribution lines and the capacity of the plant. It was a long-term plan (15-20 years). He assessed lift stations and existing distribution systems and prepared a concept for the systems. Malli also prepared an RFP under infrastructure program (three levels of government-civic, province and federal.) The project was delivered from initiation, planning, implementation, performance and monitoring, and closing phase.

### Design-build Projects - Government of Manitoba: Construction Value: \$500K-\$5m

**Role:** Project Manager, **Scope:** Malli developed scope of work for design-build for government of Manitoba Infrastructure projects. The infrastructure included roads, buildings, trails, water and sewer systems, lift stations, sea walls for erosion protection, dredging techniques of lakes, water treatment plants, sewage lagoons, distribution systems, waste management techniques, signage, buildings, drainage systems, electrical system, structural analysis, camp grounds, security systems, parking lots and shower buildings, solar systems; assessment of buildings, environmental assessment, etc. Projects were delivered on schedule and within allocated budget.

Construction and renovations of new schools, hospital, community centers, arenas, offices, civic offices, tank farms, correctional centers, generating stations, balancing of electric distribution systems, staff housing and many more. The projects were delivered on schedule and within allocated budget. Malli's responsibilities included to provide overall management to ensure the successful delivery of major and minor (Capital and O&M) and technically complex projects, including delivering a strategy to complete all project, management of contracts, ensuring adherence to approved scopes of work, budgets and schedules.

