

Livingston Engineering Associates LTD. (LEA)

59 Horton Crescent, Yellowknife, NT. X1A 3B8

Livingston Engineering Associates LTD

Jaime D. Goddard, P.Eng. Civil Engineer

Registered Business:

Nova Scotia Since 2000
Nunavut Since 2008
Northwest Territories Since 2014

LEA Federally-Incorporated

Established in 2013

LEA NAPEG Registration

Permit to Practice No. P-900

Jaime D. Goddard obtained her Bachelor of Engineering in Civil Engineering from Dalhousie University in Halifax, Nova Scotia. She worked for the Halifax Regional Municipality Traffic & Transportation and Regional Planning departments before relocating to Yellowknife in December 2007, where she was quickly hooked by the unique charms and challenges of the North.

Working as a consulting engineer, Jaime has developed an understanding of Cold Regions Engineering in terms of appropriate technologies, remote location travel and construction logistics, and the cultural context of the Territories. She has taken several courses on permafrost and other cold regions engineering issues and continues to learn about these topics both professionally and as a personal interest.

Her work in the North has included water treatment systems, water source evaluation, tank farms, Environmental Assessments, remediations, community roads, and drainage plans for communities and small sites. She has managed and designed projects in both the NWT and Nunavut, and especially enjoys writing technical reports and explaining to “southerners” how things are done in the North.

Jaime serves on the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (NAPEG) council as well as the Northern Territories Water and Waste Association (NTWWA) board of directors, to which she was elected in November, 2013.

Education

- Bachelor of Engineering (Civil), Dalhousie University, 2004, Halifax, Nova Scotia

Work History

Lead Civil Engineer (Northern Design), Livingston Engineering Associates LTD, Yellowknife, NT, November 2013-present

Senior Technical Officer Water & Sanitation, GNWT Municipal & Community Affairs, Yellowknife, NT, January 2015-present

Acting Team Lead Engineering Water & Sanitation, GNWT Municipal & Community Affairs, Yellowknife, NT, August 2014-January, 2015

Team Lead Civil, Williams Engineering Canada Inc, Yellowknife, NT, March 2014-August 2014

Civil Engineer, Williams Engineering Canada Inc, Yellowknife, NT, Feb 2008-August 2014

Engineering Student, Halifax Regional Municipality Planning Department, Halifax NS, spring 2004 (term position)

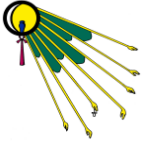
Engineering Student, Halifax Regional Municipality Traffic and Transportation Department, Halifax NS, summer 2001 (term position)

Awards

NAPEG Young Achievers Award 2013

NAPEG Member-in-Training Award 2011

Professional Courses, Continuing Education



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- *Advanced Seminar on Permafrost Engineering Applied to Transportation Infrastructure, Yukon Research Centre, Yukon College, Whitehorse YT, 2014*
- *Cold Regions Engineering Short Course, University of Washington, 2011*
- *Permafrost Engineering Short Course, University of Alberta, Edmonton, AB, 2009*

Professional Engineering Registrations

Member in Good Standing:

- *Association of Professional Engineers and Geoscientists of the Northwest Territories and Nunavut (NAPEG)*

Associations, Committees, and Professional Organizations – Currently or Recently Serving On

Association of Professional Engineers and Geoscientists of the Northwest Territories and Nunavut (NAPEG)

- NAPEG Governing Council (2014 – present)
- NAPEG Membership & Enforcement Committee (2011 – present)
- NAPEG Members-In-Training & New Professionals Committee (former chair) (2009-2014)
- NAPEG Newsletter Committee (former editor)

Northern Territories Water & Waste Association (NTWWA)

- Board Member (2013-present)

Consulting Engineers of the Northwest Territories (CENT)

- Website Designer/Maintainer

Languages: Fluent in English. Basic writing/speaking French.

Engineering Experience

Water/ Sewer/ Treatment

Nunavut Alternate Water Sources; Nunavut

Research, reporting, and project management for a project to identify emergency water sources in every community in Nunavut.

Kugluktuk Water Systems Upgrade; Kugluktuk, NU

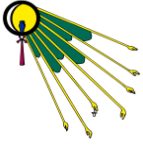
Design for new community water intake and treatment plant, including pilot testing, for source water with high turbidity and colloidal particles, seasonal saline wedge, unstable river bank, and other challenges.

Kugaaruk Water Systems Upgrade; Kugaaruk, NU

Design for new community water treatment system and emergency services during saline intrusion event in source river.

Drainage Studies & Design

Tulita Community Drainage Study; Tulita, NT



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Drainage study for a community with flooding problems and swampy areas, including GPS surveying and 3D modeling of problem areas, inventory of drainage infrastructure conditions, and prioritized recommendations for improvements.

Dettah Roads Engineering; Dettah, NT

Study of existing road conditions and design for upgrades to roads and drainage in preparation for surfacing. Recommendations for surfacing options. Prioritization of upgrades for phased construction approach. Study included problem areas identified by the community as well as a complete topographic survey of all roads.

Con Mine Drainage Channel Design; Yellowknife, NT

750m drainage channel design for mine property undergoing remediation.

Building Site Grading & Service Lines

Tulita Office and Cultural Centre; Tulita, NT

Site grading design to direct water away from building to protect ad-freeze pile foundation in warm permafrost.

Nova Buildings New Yellowknife Hotel; Yellowknife, NT

Design of water and sanitary services for new hotel, located beyond end of existing mains.

Prince of Wales Northern Heritage Centre Pellet Boiler; Yellowknife, NT

Design of building pad and grading for pellet boiler building and pellet silo.

Red Deer Native Friendship Centre; Red Deer, AB

Site drainage and service lines for multiple buildings.

New Police Building; Inuvik, NT

Design of grading, earth ramps, gabion walls, water and sewer service lines for new police building and garage.

Behchoko Sportsplex Addition; Behchoko, NT

Grading, water and sewer service for arena renovations and addition.

Behchoko Long Term Care Facility; Behchoko, NT

Grading and drainage design.

Somba K'e Civic Plaza; Yellowknife, NT

Design and construction services for water and sewer services.

Deline School Roof/Site Drainage Improvements; Deline, NT

Site survey, design of site drainage.

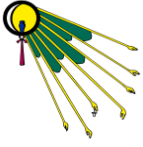
Wildcat Café Structural Assessment; Yellowknife, NT

Drainage design for foundation upgrades.

Greenstone Building Drainage Study; Yellowknife, NT

Design for parking lot drainage and stormwater retention.

Yellowknife Lot 30 Subdivision; Yellowknife, NT



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Site layout and access road design.

Easter Seals Camp Horizon; Bragg Creek, AB
Site grading, service lines, stormwater holding pond.

Fuel Facilities and Tanks

National Defense Tank Replacement; Yellowknife, NT
Project management and environmental engineering for replacement of underground tank with a new aboveground tank at the DND Evans Building.

Baker Lake Fuel Facility Upgrades; Baker Lake, NU
Design and project management for fuel facility expansion and code upgrades.

Lutsel K'e New Fuel Facility; Lutsel K'e, NT
Resident engineering services and design of minor structural elements.

RTL Fuel Facility Fire Protection; Yellowknife, NT
Design and construction services for fire suppression system.

Giant Mine Fuel Facility; Yellowknife, NT
Site survey for new fuel facility.

Deline Fuel Facility; Deline, NT
Layout, design, project management and construction services for upgrade of existing community fuel facility and new aviation fuel facility at airport.

Snap Lake Fuel Facility O&M Manuals; Snap Lake, NT
Project Manager for design and production of Emergency Procedures charts for fuel facility.

CBC Fuel Tank Replacement; Yellowknife, NT
Design, project management, and construction services for replacement of fuel tank.

Paulatuk RCMP Detachment Fuel Tank; Paulatuk, NT
Containment berm design.

BHP Diamond Sorting Facility; Yellowknife, NT
Design services for new fuel tank installation.

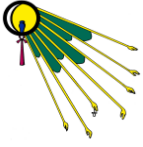
Inuvik Cardlock; Inuvik, NT
Design services for new privately-owned cardlock fuel facility.

Environmental/Hazardous Materials

RTL Yard Remediation; Yellowknife, NT
Fieldwork and Remediation Action Plan for fuelling station in trucking company yard.

Camco Phase I ESA; Yellowknife, NT
Phase I ESA for industrial lot with multiple buildings.

Sachs Harbour Tank Farm Environmental Sampling; Sachs Harbour, NT



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Soil and paint sampling for airport tank farm environmental assessment.

NPREIT Cambridge Bay Phase I ESAs; Cambridge Bay, NU
Phase I ESAs for multiple residential properties.

NEXTreme Phase I ESA; Yellowknife, NT
Project management and review of report.

NPREIT Phase I ESA 6 Properties; Cambridge Bay, NU
Lead assessor for Phase I ESA on 6 multi-unit residential properties, including fieldwork and reporting.

NPREIT Iqaluit Phase I ESAs; Iqaluit, NU
Lead assessor for Phase I Environmental Assessment for six commercial and residential buildings.

Chilkat Phase I ESA; Yellowknife, NT
Project Manager and lead assessor for Phase I Environmental Assessment for five commercial buildings.

Frobisher House PHC Remediation; Yellowknife, NT
Site supervision and reporting for hydrocarbon remediation.

GNWT 4 Phase II ESAs; Various, NT
Phase II Environmental Assessment for Enterprise Visitor Information Center.

NPREIT ESA's; Yellowknife, NT
Phase I Environmental Assessments for several multi-residential properties.

MACA ESA's for 5 Sites; Various, NT
Phase I/II Environmental Assessments for water treatment plants in Fort Good Hope and Lutsel K'e.

McDonald Drive Residential Fuel Spill; Yellowknife, NT
Assessment and remediation advice for shoreline fuel spill

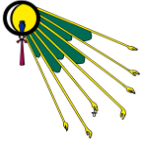
Sunridge Apartments Phase I ESA; Yellowknife, NT
Phase I Environmental Site Assessment for multi-residential property.

Baker Lake Fuel Facility Assessment - Phase II ESA; Baker Lake, NU
Project management and reporting for a fuel facility assessment, including a Phase II ESA for hydrocarbon contamination.

Cambridge Bay Tank Farm Phase II ESA; Cambridge Bay, NU
Fieldwork and reporting for Phase II ESA for hydrocarbon contamination for multiple tank farms.

Inuvik Phase I ESAs; Inuvik, NT
Phase I ESAs for several properties in Inuvik.

NPREIT Iqaluit Phase I and II ESAs; Iqaluit, NU
Phase I ESAs for 7 properties and Phase II ESAs for two properties.



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Northern United Place Asbestos Management; Yellowknife, NT
Asbestos management manual for commercial/residential building.

Phase I ESA Bartesko Court; Yellowknife, NT
Phase I ESA for multi-unit residential building.

Arctic Sunwest Jet Fuel Cleanup; Yellowknife, NT
Project management for remediation guidance and soil sampling.

Other

Kitnuna Camp Residence Addition; Cambridge Bay, NU
Project management of Architectural, Structural, Electrical, and Mechanical design of a new wing for a permanent construction camp residence building in the Arctic. The project was completed on an extremely short schedule, including sourcing mechanical equipment in time for delivery to the annual community resupply barge.

Ft. Simpson INAC Building Chain Link Fence; Ft. Simpson, NT
Design review and costing.

Con Mine Energy Study; Yellowknife, NT
Data acquisition for feasibility study for geo-thermal power generation project.