REQUEST FOR DECISION

MEETING: Special Council Meeting	**Date: August 11, 2025**
AGENDA NO.: 1	
TITLE: Call to Order	
ORIGINATED BY: *Karen O'Connor, CAO*	

Official Administrator Doug Lagore calls the August 11, 2025, Village of Cremona Special Council meeting to order at _____ pm

RECOMMENDED ACTION:

Official Administrator Lagore calls the Village of Cremona Special Council Meeting to order at _____pm.

INTLS: CAO: KO

REQUEST FOR DECISION

MEETING: Special Council Meeting	**Date: August 11, 2025**
AGENDA NO.: 2	
TITLE: ACCEPTANCE OF AGENDA	
ORIGINATED BY: *Karen O'Connor, CAO*	

BACKGROUND / PROPOSAL:

By resolution, Council must accept the agenda.

RECOMMENDED ACTION:

MOTION THAT Official Administrator Lagore _____ accepts the Agenda as presented.

INTLS: CAO: KO

SPECIAL COUNCIL MEETING AGENDA
August 11, 2025, at 1:00 p.m.
Council Chambers – 106 1st Avenue East

ATTENDANCE: Official Administrator, Doug Lagore-VIRTUAL

OTHER PRESENT: CAO, Karen O'Connor, IT, Glen Harrison

ABSENT:

1. **CALL TO ORDER**

2. **ACCEPTANCE OF AGENDA**

3. **NEW BUSINESS**
   a) **RFD 25-08-068** Awarding the Infrastructure Audit Proposal
   b) **RFD 25-08-069** Purchasing Plow and plow box

4. **ADJOURNMENT**

REQUEST FOR DECISION 25-08-068

MEETING: Special Council Meeting **Date: August 11, 2025**

AGENDA NO.: a)

TITLE: New Business - Awarding the Infrastructure Audit Proposal

ORIGINATED BY: *Karen O'Connor,* CAO

BACKGROUND / PROPOSAL:

Alberta Community Partnership (ACP) – Infrastructure Audit

The Village of Cremona has currently reviewed three proposals to complete the infrastructure audit, a task requested through the Viability Review from Municipal Affairs.

The three-proposal received were from MPE a division of Englobe, Public Works Management Corp. and Avodahtec.

DISCUSSION / OPTIONS / BENEFITS / DISADVANTAGES:

Side-by-Side Comparison Summary:

Factor	MPE	PWMC	Avodahtec
Local Knowledge	Extensive history with Cremona (20 years)	Limited local history	No direct history with Cremona
Experience	43 years of municipal engineering	Strong general infrastructure experience	Focus on risk-based asset management and capital planning
Scope of Work	Infrastructure studies, water upgrades, street improvements, stormwater plans	Infrastructure assessments, operational models, service delivery optimization	Risk-based assessments, 10-year capital and operational plans
Approach	Familiarity with Cremona, more tailored to current infrastructure	Phased, methodical approach with multiple operational models	Data-driven, long-term asset management and planning
Strengths	Local expertise, proven track record in Cremona	Phased, flexible approach to optimize service delivery	Long-term sustainability, risk management
Weaknesses	Higher cost, less emphasis on long-term risk	Higher cost, Less local experience, less focus on asset management	No specific past projects with Cremona, might lack local context

Decision Factors to Consider:

- **Budget vs. Expertise**: If budget constraints are tight, **Avodahtec's** may offer a more cost-effective option with less local experience. However, if long-term sustainability and minimizing risk are top priorities, **Avodahtec**'s approach to capital planning and risk management could be highly valuable.
- **Local Knowledge vs. Broader Solutions**: **MPE**'s extensive experience in Cremona could be crucial if local context is a major factor. However, if Cremona is looking for a fresh perspective or more comprehensive long-term planning, **Avodahtec**'s strategy could provide the necessary direction.
- **Service Delivery Models**: If Cremona is interested in exploring different operational models or partnerships for service delivery, **PWMC** offers a thorough evaluation of these alternatives.

COSTS / SOURCE OF FUNDING (if applicable):

ACP Grant funds will be covering $120,000.

RECOMMENDED ACTION:

MOTION THAT Official Administrator Doug Lagore approves the Village of Cremona to award the infrastructure audit to MPE, a division of Englobe, at the cost of $130,000.

INTLS: CAO KO

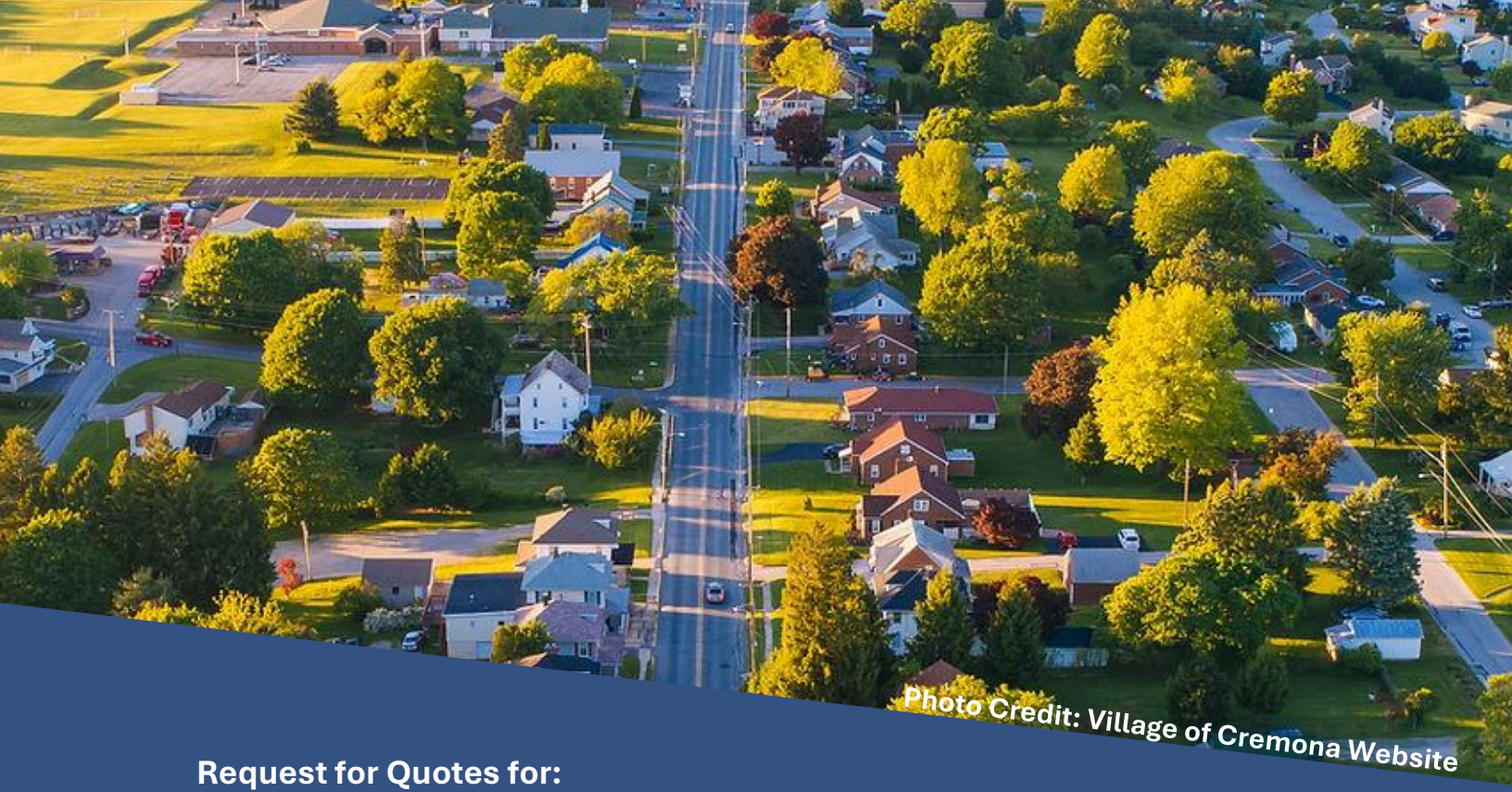


Photo Credit: Village of Cremona Website

Request for Quotes for:

VILLAGE OF Cremona

VILLAGE OF CREMONA

Infrastructure Audit

Proposal Contact:
Colin McNab, P.Eng.
Calgary Region Manager

MPE a division of Englobe
#320, 6715 – 8 Street NE
Calgary, AB T2E 7H7

Phone: 403-828-3057
Email: cmcnab@mpe.ca

Closing Time/Date: 12:00 pm on Wednesday, July 9, 2025

Email Submission: cao@cremona.ca

Proud of Our Past... Building the Future

www.mpe.ca

Suite 320, 6715 - 8 Street NE
Calgary, AB T2E 7H7
Phone: 403-250-1362
1-800-351-0929

a division of Englobe

Village of Cremona
205 – 1 Street E
Cremona, Alberta
T0M 0B9

July 9, 2025
File: Proposals/2490/P01.Infrastructure Audit

via email: cao@cremona.ca

Attention: Karen O'Connor
Chief Administrative Officer

Dear Ms. O'Connor:

Re: Request for Proposals
Infrastructure Audit

MPE a division of Englobe (MPE) is pleased to submit a proposal to undertake the Infrastructure Audit for the Village of Cremona (Village). This proposal is submitted in accordance with the Request for Proposals (RFP) posted on Albert Purchasing Connection.

Highlights of our Proposal are:

- MPE is an Alberta-based Municipal Engineering firm who has been providing engineering support to Municipalities throughout Alberta for the past 43 years. During this time, we have completed infrastructure assessments and strategic plans, and developed multi-year capital works budgets for many communities similar to the Village.
- MPE is very familiar with providing engineering support for over 20 years to Hanna, Oyen, Consort, Delia, Youngstown, Cereal, Longview, Trochu, Rockyford, and Standard.
- MPE has recently completed Infrastructure Master Plans (IMPs), audits and/or capital plans the Hamlet of Cereal, the Villages of Youngstown, Big Valley, Bittern Lake, and Delburne, as well as the Towns of Daysland, Hanna, and Coronation.
- MPE is also familiar with the Village, completing various assignments over the past 20 years including:
    - Infrastructure Study for the Village in 2005.
    - 2007 Raw Water Upgrade.
    - 2016 and 2017 Streets Improvement Program.
    - Various upgrades to the Villages Water Treatment and Pumping Facilities.
    - Ongoing operations and SCADA support.
    - 2023 Stormwater Management Plan.

As a result, MPE is well positioned to effectively and efficiently execute the infrastructure audit on behalf of the Village. Thank you for your consideration of our submission. Should you have any questions or require clarification, please contact the undersigned at 403-828-3057.

Yours truly,

MPE a division of Englobe

Colin McNab, P.Eng.
Calgary Region Manager

CM/vv
Encl.

TABLE OF CONTENTS

APPENDICES

1.0 INTRODUCTION

The Village of Cremona (Village) is undertaking an Infrastructure Audit as part of a Viability Review being undertaken by Alberta Municipal Affairs. This assessment is to determine if the municipality will continue to operate as its own entity or be amalgamated into Mountain View County. The Village has a population of 437 and is located approximately 40 minutes northwest from Calgary.

Like many communities, the Village relies on the local tax base, user fees, and grant funding to fund capital expenditures. With increasing budget constraints and a decrease in federal/provincial funding, it is becoming more important for municipalities to stretch their available dollars. This is particularly challenging for small rural municipalities in Alberta that have a declining population base and face higher capital/operating costs than the larger urban centers. Rural municipalities face the challenge of limited local resources and may need to pay a premium to get contractors to come to their community.

This Audit will assist in prioritizing capital spending, provide direction to assist with long-range budget planning, review annual operation and maintenance cost, and assess if current sources of funding are adequate to meet long-term demands. There are several reasons that an Infrastructure Audit is important at this time including:

1. Assesses the condition of the existing infrastructure.
2. Consolidates infrastructure needs into a single document for staff, Council, rate payers, and Senior Government officials.
3. Develops a prioritized capital budget program based on an overall condition assessment of all infrastructure. This ensures that work is completed in a cost-effective and efficient manner and minimizes disruption to the public. For example, underground utilities upgrades are coordinated with road overlay program.
4. Determines the capital asset value of Village infrastructure.
5. Aids management and councils in long-term capital planning to help identify priorities of infrastructure upgrades. This plan can be integrated with an asset management program.
6. Assists Councils in assessing long-term budget requirements.
7. Provides a summary document when approaching the government for additional sources of funding.

This Audit will provide an overview of the state and capacity of the community's sanitary collection, water, road and stormwater systems as well as the condition of the transportation network (pavement, concrete, sidewalks) and buildings. Creating and implementing a plan allows Council to be proactive in its decision-making role, especially when dealing with future development opportunities and budgeting.

We would consider this level of study to be a "preliminary" or "scoping" level study. At this level, we review and assemble as much of the information that is available including our own records from previous projects, interview staff, carry out some short field visits and inspections, and assemble costs and recommendations.

The Infrastructure Audit will provide the Village with the following outcomes that will assist with infrastructure planning:

Systems Assessment – MPE has developed assessment matrixes to help prioritize condition and upgrade requirements. These matrixes evaluate risk based on the condition and importance of the infrastructure. For example, a water main servicing a cul-de-sac may be assessed as being in poorer condition than a trunk main, but a trunk main would be ranked as higher priority due to the risk to the community due to a break.

Each infrastructure system will be evaluated individually on the risk matrix based on the condition and importance factor to rank each infrastructure need. The matrices have been integrated into GIS database to allow for easier changes of values and evaluation of different scenarios. Once prioritized, a work plan will be developed for each infrastructure system, and a combined matrix will be developed to prepare an overall prioritized consolidated work plan.

Table 3 - Risk Score

Water Pipeline Importance						
	5	6	7	8	9	10
	4	5	6	7	8	9
	3	4	5	6	7	8
	2	3	4	5	6	7
	1	2	3	4	5	6
		1	2	3	4	5
		Water Pipeline Condition				

The Infrastructure Priority List – In our experience, we have found that the format of the Infrastructure Audit is often as important as the content. To be useful to Council and staff, the final product must be concise and easily referenced. The Infrastructure Priority List provides a summary checklist that summarizes the recommended annual capital program and budget. It would list each facility improvement and the respective cost, grant funding availability, and pertinent notes. Council could easily reference it on an ongoing basis with just a quick glance.

			ORDER OF MAGNITUDE COST ESTIMATES				ESTIMATED PROJECT COSTS
Proposed Construction Year	Overall Importance Rating [4]	Infrastructure Projects	Road System Upgrade Costs [1]	Water System Upgrade Costs [7]	Sanitary System Costs [6]	Stormwater System Upgrade Costs	PROJECTS TOTAL
2015	6.75	Centre Street - Railway to 2nd Ave, 1 Ave-Centre-W; 1st St E Railway to 1 Ave	$1,041,000	$274,000	$43,000	$0	$1,358,000
2016	6.725	3rd St W, Railway to 3 Ave	$515,000	$237,000	$91,000	$400,000	$1,243,000
2017	5.25	Fox Lake Trail - Argue to Pioneer	$521,000	$673,000	$43,000	0	$1,237,000
2018	5.47	2nd Ave from 5th St W to 1st St. E.	$1,064,000	$0	$43,000	0	$1,107,000
2019	5.12	Fox Lake Trail- Palliser to Argue; Golf Course Cres	$643,000	$366,000	$43,000	$0	$1,052,000
2020	5.01	Palliser from Fox Lake Trail to Railway, Winkler S. of Shacker	$1,063,000	$0	$43,000	$0	$1,106,000
2021	5.8	1st St W & 4 St W between Railway & 1st Ave; Railway between Centre & 1st St. W	$558,000	$301,000	$43,000	$0	$902,000
2022	4.9	Pioneer Trail from Fox Lake Trail to Railway	$334,000	$510,000	$43,000	$220,000	$1,107,000
2023	4.9	Pioneer Trail from Railway to Municipal Road	$371,000	$979,000	$43,000	$0	$1,393,000
2024	5.2	Centre Street - 2nd Ave to 4th Ave; 4th Ave Centre to 1st St. E	$816,000	$271,000	$43,000	$0	$1,130,000
			ROADS	WATER	SANITARY	STORMWATER	COMBINED
		TOTAL COSTS:	$6,926,000	$3,611,000	$478,000	$620,000	$11,635,000

2.0 PROJECT TEAM: CORPORATE AND PERSONNEL

2.1 Corporate Team

MPE a division of Englobe (MPE) is a medium-sized engineering consulting firm providing professional engineering services to varied municipal clients throughout Alberta. MPE was formed in 1983 and has 13 offices located in Alberta, British Columbia, Saskatchewan, and Manitoba. MPE's size allows for ***personal attention*** on all projects ***from senior members*** *of the company*.

The work identified in this proposal would be managed and completed out of our Calgary office with support from other offices on an as-needed basis***. Table 2.1*** provides a summary of our experience, expertise, and services MPE has been providing to municipalities and stakeholders throughout Alberta.

Table 2.1: MPE Experience

RELEVANT EXPERIENCE & EXPERTISE	PROJECT ROLE
+ Extensive Municipal engineering experience for small communities in Western Alberta including the Village. Currently providing engineering support to Mountain View, Rocky View and Foothills Counties (including various Hamlets), Olds, Delburne, Trochu, Three Hills, Beiseker, Crossfield, Youngstown, Cereal, Rockyford, Standard and Longview to name a few. + Past experience in preparation of IMPs for many municipalities throughout Alberta, including an infrastructure study for Youngstown and Delia and an infrastructure audit for the former Village of Cereal viability study. Cereal is now a Hamlet within Special Areas. + Provided engineering services for Cremona since 2005, including: o **Infrastructure Study for the Village in 2005**. o 2007 Raw Water Upgrade. o 2016 and 2017 Streets Improvement Program. o Various upgrades to the Villages Water Treatment and Pumping Facilities. o Ongoing operations and SCADA support. o 2023 Stormwater Management Plan. + Having completed the 2005 Infrastructure Study and most recently the Stormwater Management Plan in 2023 for the Village, MPE has the background knowledge and data files to provide an updated Infrastructure Audit.	+ Prime Consultant + Water, wastewater and stormwater modelling + Road assessments and documenting + Infrastructure assessment including roads and deep utilities + Preparation of order-of-magnitude costs + Prioritizing required improvements + Engaging with the Village to develop effective and practical deliverables (*<u>not</u> a document to simply 'sit-on-the-shelf'*) + Reporting and Council presentation

2.2 Project Team

Table 2.2 provides the qualifications and experience of the key team members and illustrates what each individual will bring to the project. Jill Hardy will be the senior reviewer. Dan Modderman will act as Project Manager and will be responsible for overall coordination and scheduling. Detailed resumes of project personnel are provided in ***Appendix A***.

Table 2.2: Key Project Management Team Members

PROJECT MANAGER, DAN MODDERMAN, P.ENG.	
CLASSIFICATION: E3	***BASED: CALGARY 21 YEARS' EXPERIENCE***
WHY NOMINATED	**RECENT & RELEVANT PROJECTS UNDERTAKEN**
+ Specializing in infrastructure planning and developing and implementing service studies and utility master plans. + Extensive infrastructure assessment and management plans. + Extensive water treatment, supply, distribution experience. + Wastewater collection, pumping and treatment experience. + Knowledge of AEPA water and wastewater standards and guidelines. + Experience working with smaller rural Municipalities throughout South-central and Eastern Alberta.	+ Project Manager: Rocky View County Servicing Studies 2024 Water and Wastewater Servicing Studies for Conrich, OMNI and Langdon areas. + Project Manager: Recently completed the Village of Youngstown and Hamlet of Cereal Infrastructure Management Plans. + Project Manager: Henry Kroeger Water Commission Infrastructure Management Plan and utility rate schedule. + Project Engineer: University of Calgary infrastructure condition assessment and management plan. + Project Manager: Henry Kroeger Water Services water reservoir expansion and generator upgrade.
SENIOR REVIEW, JILL HARDY, P.ENG.	
CLASSIFICATION: E5	***BASED: CALGARY 22 YEARS' EXPERIENCE***
WHY NOMINATED	**RECENT & RELEVANT PROJECTS UNDERTAKEN**
+ Experienced in management of multi-disciplinary projects. + 10 years of Experience as "Village Engineer" for Cremona; therefore, understands the Village's infrastructure and interests. + Has acted as Project Manager for various assignments for the Village over the past 10 years. + Infrastructure Management Plan experience.	+ Project Manager/Senior Engineer: Village of Cremona's Capital Plan based on their 2005 Infrastructure Management Plan + Acts in a similar role for other communities including the Town of Diamond Valley. + Project Manager/Senior Engineer: Cremona Utility Upgrades and Streets Improvement programs. + Knowledge of Alberta Environment and Protected Areas (AEPA) water and wastewater standards and guidelines.
CORPORATE REPRESENTATIVE, COLIN MCNAB, P.ENG.	
CLASSIFICATION: E6	***BASED: CALGARY 28 YEARS' EXPERIENCE***
WHY NOMINATED	**RECENT & RELEVANT PROJECTS UNDERTAKEN**
+ Calgary Region Manager with overall responsibility of work quality and team production. + 28 years of experience in all aspects of water, wastewater and multi-discipline projects.	+ Undertaken several Infrastructure Management Plans for numerous clients to assist in their long-term planning and budgets. Studies covered water, wastewater, stormwater, and road work infrastructure systems.
GIS, DAVE MERRICK, B.SC.	
CLASSIFICATION: T2	***BASED: CALGARY 18 YEARS' EXPERIENCE***
WHY NOMINATED	***RECENT & RELEVANT PROJECTS UNDERTAKEN***
+ Development of GIS infrastructure system and database. + Importing and exporting GIS databases to infrastructure modelling software. + Extensive ARCGis and LiDAR mapping processing.	+ GIS Technician: Town of Crossfield and Village of Delburne infrastructure GIS databases. + GIS Technician: Beiseker Asset Management Program. + GIS Technician: Fox Lake Cree Nation Infrastructure Asset Management Plan.

PAVEMENT DATA SPECIALIST, TODD LOCKIE	
CLASSIFICATION: T5	***BASED: EDMONTON 35 YEARS' EXPERIENCE***
WHY NOMINATED	**RECENT & RELEVANT PROJECTS UNDERTAKEN**
+ Over 35 years' experience in pavement management, data collection, and assessment evaluation. + Development of technology and software for pavement data collection.	+ Pavement data collection, analysis and reporting for numerous Municipalities throughout Alberta including City of Red Deer, City of St. Albert, and City of Leduc. + Pavement and road assessments on various Infrastructure Management Plans (complete or ongoing) including the Towns of Daysland and Coronation, the Villages of Bittern Lake, Big Valley, Delburne, and Youngtown, and the Hamlet of Cereal.

ELECTRICAL ENGINEER, GERALD PAPWORTH, P.ENG.	
CLASSIFICATION: E5	***BASED: CALGARY 38 YEARS' EXPERIENCE***
WHY NOMINATED	**RECENT & RELEVANT PROJECTS UNDERTAKEN**
+ Knowledge of the majority of water systems throughout South-central and Eastern Alberta. + Water/wastewater electrical and SCADA support to various Municipalities/commissions throughout Eastern Alberta. + Electrical and controls design of Municipal water and wastewater treatment collection, distribution and treatment systems. + Manager of Calgary Region Electrical department.	+ Electrical Engineer: Village of Cereal Water Pumpstation and Reservoir Upgrades. + Senior Electrical Engineer: Henry Kroeger Regional Water Commission reservoir pump station upgrades. + Senior Electrical Engineer: 2017/18 Wheatland Regional Water Supply upgrades – Standard and Rockyford Alberta. + Senior Electrical Engineer: 2018 Village of Delia Water Reservoir Expansion. + Electrical/Controls Engineer: Town of Hanna Main Lift Station construction.

STORMWATER ENGINEER, TAYLER MARRA, P.ENG.	
CLASSIFICATION: E4	***BASED: CALGARY 11 YEARS' EXPERIENCE***
WHY NOMINATED	**RECENT & RELEVANT PROJECTS UNDERTAKEN**
+ Stormwater Team Lead in the Calgary office. + Extensive experience authoring Master Drainage Plans (MDPs). + Managed many municipal construction and stormwater design projects. + Knowledgeable on site-specific stormwater management designs.	+ Stormwater Engineer: Rocky View County Master Drainage Plans (Janet, Conrich, OMNI). + Stormwater Engineer: Great Plains/Starfield Stage Master Drainage Plan and Pond Reports, Real Estate and Development Services department, City of Calgary. + Stormwater Engineer: Six Mile Coulee, Tiffin Drainage Master Drainage Plan, Lethbridge County. + Stormwater Engineer: Various other MDPs including for Beiseker and Cremona.

3.0 PROJECT EXPERIENCE AND TECHNICAL COMPETENCE

3.1 Proven Project Experience: General

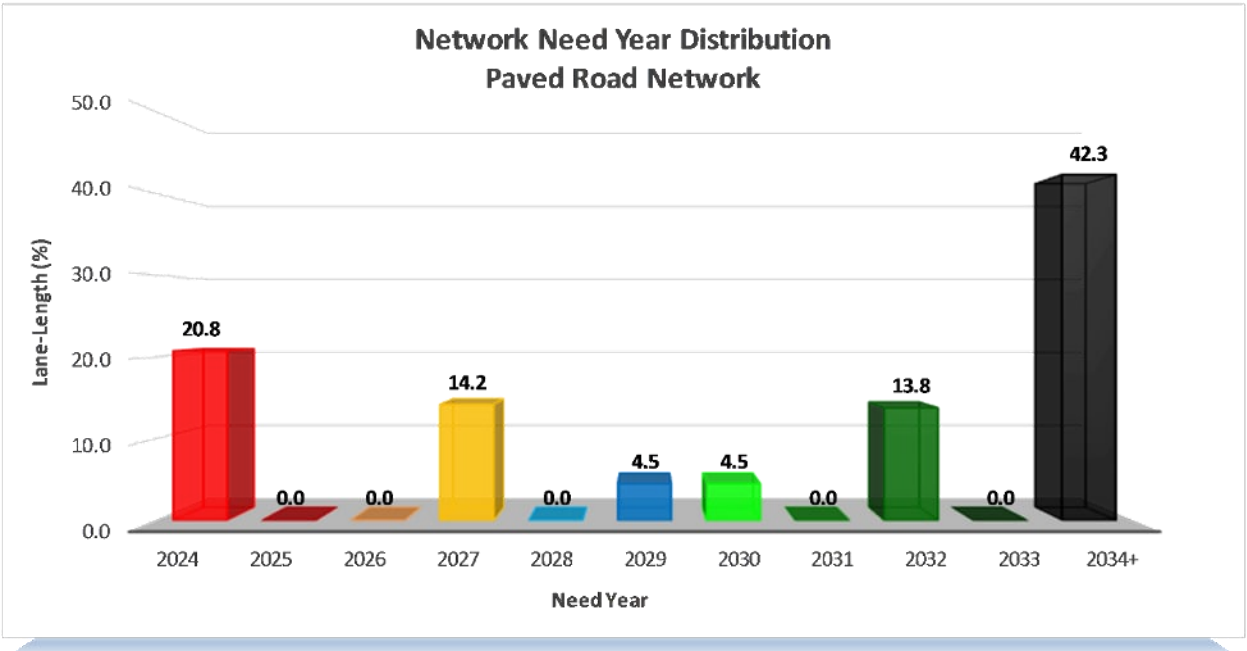
Table 3.1 provides a short summary of the various recent infrastructure assessment projects, master drainage plans and servicing studies for future growth that MPE has been involved in.

Although different in setting, the projects require expertise in:

- Keeping abreast of and utilizing current and ever-evolving product and construction technologies.
- Following, implementing, and adapting to current environmental requirements.
- Understanding, obtaining, listening, and incorporating stakeholders' concerns, issues, and requirements.
- Having technically sound, engineering experienced people leading, participating, and implementing projects.
- Understanding and working with the regulatory agencies on a continual basis and ensuring their demands are met, providing a continuous flowing project.

The above points all come with vast project experience and MPE brings this to each project moving forward.

Detailed Project Profiles are located in ***Appendix B***.



	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034+	Total
LL %	20.8	0.0	0.0	14.2	0.0	4.5	4.5	0.0	13.8	0.0	42.3	100
LL km	2.6	0.0	0.0	1.8	0.0	0.6	0.6	0.0	1.7	0.0	5.2	12.3
Section #	11	0	0	3	0	2	2	0	3	0	19	40

Excerpt from Cereal Infrastructure Management Plan, January 2025

Table 3.1: Infrastructure Study Projects

CLIENT	INFRASTRUCTURE	PROJECT DESCRIPTION	YEAR
Village of Beiseker *Contact: Heather Leslie* *Chief Administrative Officer* *Phone: 403-947-3774* *Email: beiseker@beiseker.com*	Storm Sewer	MPE identified various drainage improvement projects to address the flooding concerns within the Village during rainfall and snowmelt events caused by local and regional runoff. Based on this study, the Village and Rocky View County received funding from the Alberta Community Partnership to implement their Regional Stormwater Framework.	2022
Hamlet of Cereal (formerly known as Village of Cereal), Special Areas No. 3 *Contact: Tori Munroe* *District Office Manager* *Phone: 403-664-3618*	Potable Water Sanitary Sewer Storm Sewer Roads	Development of an Infrastructure Master Plan to assess the condition of the Village's infrastructure and to prepare a 10-year prioritized capital works program.	2021
Town of Hanna *Contact: Matthew Norburn, CAO* *Phone: 403-854-4433* *Email: mnorburnl@hanna.ca*	Potable Water Sanitary Sewer Storm Sewer Roads	The Town of Hanna has a population of about 2,700 people covering an area of 8.5 km^2. The Town maintains 38 km of water main, 28 km of sanitary sewer, 13 km of storm sewer, and 34 km of roads. The Town's infrastructure base map was exported to a GIS database for data collection and analysis. Condition assessment and system modelling was undertaken to develop a 10-year capital infrastructure plan.	2014
Village of Youngstown *Contact: Emma Garlock* *Municipal Administrator* *Phone: 403-779-3873* *Email: ytown@netgo.ca*	Potable Water Sanitary Sewer Storm Sewer Roads	Development of an Infrastructure Master Plan to assess the condition of the Village's infrastructure and to prepare a 10-year prioritized capital works program.	2021
Palliser Regional Municipal Service & Town of Hanna GIS System *Contact: Justin Hill* *Phone: 403-854-3371* *Email: jhill@palliserservices.ca*	Potable Water Sanitary Sewer Storm Sewer Roads	MPE has been working with Palliser Regional Municipal Services to develop an infrastructure GIS database for the Town of Hanna. The database will allow Town personnel to easily access reports, as-builts, infrastructure maps and maintenance records. The Team is currently exploring the feasibility of expanding the technology to other Municipalities in Eastern Alberta that are currently serviced by MPE and Palliser.	2021
Special Areas Board *Contact: Shaune Kovitch* *Director of Municipal Services* *Phone: 403-854-5603* *Email: shaune.kovitch@specialareas.ab.ca*	Potable Water	MPE was retained to update the Rural Water Feasibility that was submitted in 2012. Since the creation of the 2012 Study, Special Areas Board has completed additional work related to the regional water system and requested that these works be incorporated into the updated study. The areas to be incorporated include the Cappon Area, a potential new Hutterite Colony, the Iddesleigh/Jenner area and Oyen-West Area. Scope included Concept Overview, Public Engagement, and updating and submitting the Regional Water Feasibility Study.	2024

CLIENT	INFRASTRUCTURE	PROJECT DESCRIPTION	YEAR
Rocky View County *Contact: Byron Riemann* *Acting Chief Administrative Officer* *Phone #: 403-230-1401* *Email: briemann@rockyview.ca*	Conrich/OMNI/ Langdon Potable Water Sanitary Sewer Storm Sewer	Projects involved the development of master drainage plans (MDPs) for Conrich, Janet, and OMNI ASP on behalf of Rocky View County. The MDPs included design guidance and infrastructure servicing requirements for future development, recognizing the limited drainage capacity of the area, and identifies release rates, regional drainage corridors, water quality improvement and potential water reuse opportunities. Modelling of Low Impact Development (LID) practices was a key component with comprehensive continuous simulation hydrological analysis being undertaken. The benefits of incorporating LID practices and how they can assist in managing the water balance needs of sensitive wetlands were provided.	2024
Kneehill County *Contact: John McKiernan* *Manager of Utilities* *Phone #: 403-443-5541* *Email: john.mckiernan@kneehill.com*	Potable Water Sanitary Sewer Stormwater Sewer Roads	Project included preparing an Infrastructure Management Plan and 10-Year Capital Plan, providing a cursory review of the state and capacity of the municipal infrastructure for the Hamlets of Torrington and Swalwell. This includes water, sanitary sewer, and road network. This plan also provides an upgrading/maintenance schedule which can be used for the Town's budgeting purposes.	2025
Town of Daysland *Contact: Jody Quickstad* *Chief Administrative Officer* *Phone #: 780-374-3767* *Email: cao@daysland.ca*	Potable Water Sanitary Sewer Stormwater Sewer Roads	Project included preparing an Infrastructure Management Plan and 20-Year Capital Plan, providing a cursory review of the state and capacity of the Town's municipal infrastructure including the water, sanitary sewer, as well as the road network, and considers expansion requirements to accommodate anticipated future growth. This plan also provides an upgrading/maintenance schedule which can be used for the Town's budgeting purposes.	2024
Village of Big Valley *Contact: Colleen Mayne* *Chief Administrative Officer* *Phone #: 403-876-2269* *Email: cao@villageofbigvalley.ca*	Potable Water Sanitary Sewer Stormwater Sewer Roads	Project involved a geotechnical investigation of the Village-owned Sanitary Lagoon and the identification of deficiencies and prioritization of capital upgrade projects for all infrastructure components to create a 20-year Capital Plan, complete with a cost estimate.	2024
Town of Coronation *Contact: Quinton Flint* *Chief Administrative Officer* *Phone #: 403-578-3679* *Email: quintonf@town.coronation.ab.ca*	Potable Water Sanitary Sewer Stormwater Sewer Roads	Project involved identification of deficiencies and prioritized capital upgrade projects for all infrastructure components to create a 20-year Capital Plan, complete with a cost estimate. The focus of the study was to review and assess the condition and capacity of Town-owned capital assets including water infrastructure, sanitary sewer infrastructure, stormwater infrastructure, and transportation infrastructure.	2024

4.0 SCOPE OF WORK

The level of effort that the Infrastructure Audit will require is dependent on the Village's needs, condition, and capacity of its various infrastructure systems. The following scope of work is based on our understanding of the Village's needs, and our past experience undertaking many such audits for other communities. The work identified can be referred to as a basic work plan.

4.1 General

Meetings and Information Gathering

A start-up meeting will be held with Village staff and a site visit will be conducted at various facilities. At this meeting, MPE reviews scope and gathers all available information. Our research includes:

- Obtain copies and review existing reports that were not provided during the RFP process.
- Meet with Village staff to review historic system performance and known problems.
- Obtain water meter records, lift station, pump station, and water reservoir trending data to estimate current water and wastewater demands for residential, commercial, and industrial land uses.
- Obtain population data, land use plans, and current cadastral.
- Review the previous IMP, CCTV, and other existing information, from which this assessment will advance and update.

Monthly project meetings will be held with stakeholders to keep them updated on project status. Due to distance, meetings would be conducted by Teams other than the final presentation.

Existing System Maps

MPE has worked with Cremona to produce base maps of existing infrastructure as part of the 2005 IMP and has updated them with projects completed to date. These will be utilized to for this study and updated with any new information obtained.

4.2 Water System Assessment

The 2005 IMP that MPE developed included a review of the water system, including water supply and treatment systems, water storage reservoir and the distribution pumping system. This information will be updated, and will include the following tasks:

- Review of historical problems and records available from the Village will be conducted. Operation records and the network will be reviewed for conformity with AEPA Standards.
- Conduct hydraulic modelling using WaterCAD to assess the water distribution systems' ability to meet acceptable service levels under the following scenarios:
    - Existing Average Day Demand (ADD).
    - Existing Maximum Day Demand (MDD).
    - Existing Peak Hour Demand (PHD).
    - Existing MDD plus Fire Flow.
- The model will be used to identify system pressure and flow deficiencies with particular emphasis on fire flow coverage requirements in accordance with Fire Underwriters Survey (FUS) and industry standards, but also for peak hour conditions.
    - Following identification of deficiencies, various scenarios will be simulated to rectify deficiencies, including looping and larger pipe sizes.
    - A sensitivity analysis will be run on the pump station operation scenarios to determine if pump station improvements or pressure setting changes may help with the existing system operation.

  - The model will be run again, allowing for future development and identify additional upgrade requirements.
- Review the age and suspected condition of the existing water infrastructure and develop a staged replacement plan starting with known areas of concern.
- Survey of existing valves and curb stops using drone and GPS.
- Assess condition of existing reservoir to develop an action list of repairs/work. Items would be categorized as high, medium, and low priorities.
- Conduct hydrant pressure testing to confirm fire hydrant pressures and flow rates throughout both communities and assist in calibrating the WaterCAD model. This is important as often the record drawing information is insufficient (or incorrect) to properly calibrate a water model. Spinning the valves can help to verify pipe sizes, but ultimately the hydrant tests will greatly assist calibration of the model to ensure adequate fire protection in both communities and identify any pressure or flow rate gaps for current and future development.
- Review capacity of the treated storage reservoir, based on current AEPA guidelines, for domestic and fire flow requirements.
- Review the age and suspected condition of the existing water infrastructure and develop a replacement/upgrade/maintenance project plan starting with known areas of concern.
- Develop a prioritized rehabilitation schedule and order-of-magnitude cost estimate.
- Submit the WaterCAD files to the Village after project completion.

4.3 Wastewater Assessment

The 2005 IMP that MPE developed included a review of the sanitary system. This will be updated as needed, including a site visit to the existing sewage lagoon and based on record drawings, a condition assessment will be completed. Tasks would include:

- Review previously completed sanitary sewer inspection reports and videos. An allowance has been included to undertake video of sewer mains, if required.
- Meet with operators to identify existing problem areas.
- Hydraulic analysis of sewer mains to evaluate pipe capacity versus peak hour and infiltration allowance.
- Provide alternatives to eliminate or minimize problem areas in the system.
- Complete manhole condition inspection using MPE's manhole rating and assessment spreadsheet. This will include documentation and pictures of the manhole and identification of the incoming and outgoing sewer line material type.
- Identify manhole deficiencies such as infiltration, water marks identifying surcharging due to downstream pipe capacity problems, etc.
- Complete a slope and cover assessment using newly collected survey data or as-built information provided by the Village. Identify areas where the slope or cover is inadequate and where this might affect rehabilitation method or design parameters.
- Develop a SewerGEMS model.
- Complete a condition rating assessment based on the North American Association of Pipeline Inspectors (NAAPI) inspection manual.
- Compile a database of localized and overall sewer conditions based on pipeline segments.
- Prioritize repairs based on overall pipeline condition rating, capacity limitations, and importance.
- Prepare a plan identifying pipeline conditions and problem areas of concern.
- Complete a condition and capacity assessment of the lagoons as they pertain to AEPA standards.

- Compile a database of localized and overall sewer conditions based on pipeline segments.
- Combine modelling and condition assessment results into a consolidated summary and prioritize system upgrades.
- Combine modelling and condition assessment results into a consolidated summary and prioritize system upgrades.

4.4 Storm/Drainage Assessment

The Village is predominantly serviced via an overland drainage system. The 2023 Stormwater Management Report that MPE developed included a review of the stormwater drainage. This will be updated as needed, including a visual review of the existing overland drainage system and related facilities will be completed. This will include:

- Meet with Village staff to identify existing problem drainage areas and areas prone to flooding during extreme rainfall events and compare to the findings in the 2023 report.
- Complete an overview of the modelling completed in 2023 and make any adjustment if required based on recent events.
- Where required, determine peak flow release rates based on capacity constraints of existing infrastructure and to reduce degradation of overland flow routes.
- Confirm system capacity constraints.
- Confirm potential upgrades and opportunities to free up storm sewer capacities. This may include storage or rerouting storm sewer.
- Incorporate the findings from the 2023 report into the Audit, which will include developing a prioritized work plan and Class D cost estimate.

4.5 Transportation Roads/Streets Assessment

It is expected that many of the road surfaces are in need of upgrading and a prioritized road rehabilitation schedule may be required. However, road improvements are often completed in conjunction with deep utility improvements. This lowers the risk of later surface repairs caused by failing buried infrastructure. A complete road systems (road surface, curb, and sidewalk) inventory will be established, including order-of-magnitude cost estimates of the upgrades.

Roads and concrete surfaces (sidewalk and curb and gutter) will be measured, inventoried, and rated based on the standard pavement management rating system that we have established for other infrastructure studies. This data will be managed through Geographical Information System (GIS). GIS is capable of providing a wealth of information on the Village's Infrastructure, as well as allowing for future expansion. The rating system results will be compared to the Village's current rehabilitation schedule. Surfaces that require geotechnical investigations prior to upgrading will be identified. The following tasks are envisioned:

- MPE will utilize its ICC survey vehicle to collect the surface distress, roughness, and geo-referenced video (optional). MPE has an automated data collection vehicle and iPad collection software which are able to collect real time data complete with GPS coordinates.
- Pavement assessment to identify pavement distress (cracking, potholes, patching, rutting, etc.) and riding quality.

The collected indices will be analyzed to produce key performance indicators of roughness, surface distress, structural adequacy, and overall condition.
- Assess existing roads for asphalt condition, age, and structural integrity.
- Non-destructive testing to evaluate road structural integrity. Structural adequacy will be completed using an industry-approved FWD.
- Gravel roadways will be assess based on the PASER rating methodology.
- Assess budget implications against various level of service and pavement quality deterioration.
- Develop a replacement/upgrade/maintenance project plan.

4.6 Infrastructure Master Work

The infrastructure report will include the following sections:

- Executive Summary.
- Introduction/Background.
- Condition and capacity assessment for each infrastructure system.
- Identification of deficiencies, constraints or improvements required to meet AEPA guidelines.
- A summary checklist that identifies the capacity of existing systems (sewage lagoon, water distribution plant, etc.) and what population total they can serve.
- Only existing infrastructure will be assessed. No population growth will be considered, as specified in the TOR.
- System maps showing existing infrastructure, as well as identification of recommended improvements.
- Class D cost estimates for infrastructure deficiencies and upgrades. These can be incorporated into the short-term (five-year) and long-term (ten-year) capital and operating plans.
- Recommended additional studies, if and when required.
- Conclusions.
- Appendices including any detailed analysis that was completed.

This plan will include discussions with Village staff to balance system deficiencies with budget and spending realities. Potential funding opportunities and programs will be identified in the plan.

1. <u>Financial Evaluation</u>

- Review evaluation matrix parameters with Village and adjust to reflect local conditions.
- Combine each of the above assessments to develop an overall prioritized rehabilitation program.
- Develop five and ten-year capital budget programs based on various budget scenarios.
- Review infrastructure life expectancy and an annual replacement cost based on asset value and life expectancy.
- Meet with Village personnel to review the recommended work plan and adjust to reflect other municipal or strategic planning priorities.
- Determine value of municipal capital assets.
- Review the Village's past capital and operating budgets and compare to work plans to evaluate impact on infrastructure.
- Review water and sewer utility rates and ability of rates to meet infrastructure requirements.

2. Reporting and Deliverables

- Provide results in a GIS-based format that can be incorporated into a future database maintenance program.
- Update utility base maps for use by Public Works personnel showing location of appurtenances (i.e. valves, manholes, hydrants), alignment, and sizes of water, sanitary sewer, storm/drainage infrastructure.
- Prepare a report summarizing the condition of the above infrastructure and budget requirements.
- Meet with Staff to review multi-year capital program and adjust, as required. Assume a half day workshop as per the RFP.
- Prepare a report estimating and summarizing operating actions into a yearly operating plan.
- Meet with Staff to review the ongoing operating plan. Assume a half day workshop as per the RFP.
- Prepare Final Report based on feedback of Stakeholders. Four (4) hard copies (more will be provided, if desired) and a PDF copy of the final report will be provided.
- Presentation with Council summarizing report findings and recommendations. We have assumed one presentation would be undertaken.

5.0 SCHEDULE

We envision it will take about 5-6 months to complete the audit. Road structural testing would need to be scheduled shortly after award as the Data Collection Van is committed to various other similar projects. Sanitary sewer video inspections would be completed toward the end of August. This would allow for the draft report to be completed by the end of October, with Council presentation and final report in mid to late November 2025. There is a possibility that the IMP triggers other valuable studies, which often overlap with neighbouring communities.

5.1 Grant Application Support

The timing of these assessments would allow for applications under the Alberta Community Partnership Grant to continuing assessing and upgrading your infrastructure. MPE's Grants Specialist can assist with funding applications upon request.

MPE currently employs two Grant Specialists who have over 60 years of combined experience with grant program design, grant funding advice as well as providing assistance with the completion of grant application forms. Prior to joining MPE, our Grant Specialists worked for the government in the Grant Funding division. They have detailed knowledge of funding programs and can provide program deadlines and submission requirements for grants such as Water for Life, DFPP, and many more. MPE will provide this service at no cost.

MPE's Grant Team boasts an 80%+ success rate on the applications they have made since inception, resulting in millions of dollars provided to MPE's clients.

6.0 PROJECT BUDGET

An engineering budget has been prepared based on the scope of work identified in each of the above tasks. The budget has been prepared to allow the Village the ability to choose individual components or undertake a complete assessment program. If required, the scope of work can be adjusted during the project startup phase to meet Village's budget restrictions.

Breakdown of the engineering costs would be as follows:

1.	Project Startup and Admin	$14,000
2.	Sanitary Sewer Assessment	$16,000
3.	Water Distribution Assessment	$16,000
4.	Stormwater Assessment	$10,000
5.	Roads Assessment	$20,000
6.	Financial Evaluation	$14,000
7.	Report and Council Presentation	$43,000
	TOTAL	**$133,000**

Third Party Inspection Allowances (upon approval):

1.	Sanitary Sewer Video	1.5 km @ $25/m =	$37,500
2.	Road – Non-destructive Structural Testing		$7,000

No allowance has been included for:

- Vehicle or fleet assessments.
- Building assessments.
- Fire Flow testing of fire hydrants.
- Shallow utility locates.
- Exposing of manholes, valves or other buried utilities for survey confirmation.
- Environmental assessment.
- Growth projections, or the infrastructure required to accommodate growth.

The project would be invoiced on a monthly basis at the Calgary hourly rate. MPE is a member of the Consulting Engineers of Alberta (CEA) and our rate schedule is comparable with the CEA published rates. A breakdown of the fee estimate, as well as MPE's hourly fee schedule, is included in ***Appendix C***.

A copy of our rate schedule has been provided in ***Appendix C*** for reference.

Appendix A

Resumes

Dan Modderman, P.Eng.

Project Engineer

Mr. Modderman has 21 years' experience in design, construction contract administration, and water modelling related to municipal water and wastewater infrastructure. He has completed several water distribution system models and studies for water and sanitary servicing, water supply infrastructure and water rates.

Highlights of Experience

- Water & Sanitary System Modeling – Developed and analyzed rural and urban water distribution and sanitary system models, including setup, calibration and validation. Oversaw and reviewed modeling work for accuracy and efficiency.
- Municipal Water System Design – Designed municipal water distribution systems, pump stations and water treatment plant upgrades, ensuring compliance with regulatory standards.
- Resident Engineering & Field Oversight – Supervised the construction and commissioning of municipal distribution systems, pump stations and water treatment plants, ensuring adherence to design specifications and quality standards.
- Construction Contract Administration – Managed contract administration for water pipelines, treatment plants, pump stations and sanitary lift station upgrades, including contractor oversight, progress claims and regulatory compliance.
- Water Infrastructure Studies & Rate Analysis – Conducted system capacity assessments, hydraulic performance studies and water rate analyses to support municipal planning and decision-making.
- Project Coordination & Stakeholder Engagement – Collaborated with municipalities, regulatory agencies and engineering teams to ensure successful project execution, providing technical support throughout all project phases.
- Regulatory Compliance & Quality Assurance – Ensured designs and construction projects met all municipal, provincial and federal regulations through site inspections and quality control reviews.

Education

B.A.Sc., Environmental Systems Engineering
University of Regina, 2003

Professional Affiliations

Professional Member
Association of Professional Engineers and Geoscientists of Alberta (APEGA)

Professional History

2004-Present, Project Engineer
MPE Engineering Ltd., Calgary, AB

2003-2004, Quality Control Manager
PA Bottlers (Coca-Cola), Prince Albert, SK

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PROFESSIONAL EXPERIENCE

REPORT WRITING/STUDY

- Commercial Court Infrastructure Study, Calalta Waterworks Ltd.
- Water Rates Study and Tangible Capital Assets Report, Rocky View County.
- Campus Underground Utilities Assessment (including modelling), University of Calgary.
- Infrastructure Studies, Henry Kroeger Regional Water Services Commission, Youngstown, Village of Cereal.
- Treated Water Storage Reservoir Study, Starland County.
- Water Servicing Plans (including modelling) for Rocky View County (Balzac and Conrich Areas), Rocky View Water Co-op Ltd.

WATER & SANITARY SYSTEM MODELLING

- Major Water Trunk Network and Pump Stations, City of Airdrie, City of Red Deer, Regional District of Nanaimo.
- Water: Towns in Alberta (Hanna, Carbon, Cochrane, Drumheller). Water & Sanitary: Westlock, Slave Lake RV Park.
- Rural Water Co-ops in the Calgary and Drumheller areas (CLV, Churchill, Rocky View Water Co-op, North Springbank Water Co-op).
- Regional Water Networks (Starland County, Foothills Regional).
- Other: Lafarge, Tsuut'ina Nation, Westend Lagoon Upgrade, Aldersyde Pipelines, University of Calgary, Wheatland County.

DESIGN ENGINEER

- Morley Exfiltration Gallery & Septage Lagoon, Stoney Tribal Administration.
- Munson, Morrin and Rural Water Supply Projects, Starland County and County of Stettler.
- Pump Stations, Booster Stations and Truckfills for Starland County, Rocky View Water Co-op, Regional District of Nanaimo.
- Various System Upgrades, Henry Kroeger Regional Water Commission (Emergency Generators, Water Treatment Plant).
- ATCO Structures, Consort Camp Potable Water Storage and Pump Station.
- Various Preliminary Designs and Cost Estimates for Large Rural Networks and Towns (Henry Kroeger Water Services Commission, Rocky View Water Co-op Ltd., Wheatland County, Town of Drumheller).
- Pipeline Design: Wheatland Regional Pipeline, Foothills County Aldersyde Pipeline, Wheatland County, City of Calgary Fish Creek Trunk.
- Haskayne Pavilion Water Pump Station and Chestermere Water Meter Chamber, City of Calgary.

DESIGN AND CONSTRUCTION ADMINISTRATION

- Various Water Distribution Pipelines for Rocky View Water Co-op Ltd.
- Henry Kroeger Regional Water Commission WTP Upgrade, Reservoir Renovation and Emergency Generators.
- Lift Stations: North Lift Station, Town of Turner Valley; Craigmyle Lift Station, Starland County.
- Raw Water Pump Station Building Relocation, Town of Nanton.

RESIDENT ENGINEER

- Pipelines: Starland County, Rocky View Water Co-op Ltd., Rocky View County.
- Water Treatment Plant Upgrade: Rocky View Water Co-op Ltd.

GIS

- Harvest Sky GIS, Hanna and Special Areas.
- Rocky View Water Co-op Ltd.

Jill Hardy, P.Eng.
Project Manager

Ms. Hardy is a Project Manager with MPE. She has 22 years experience as an environmental engineer in the municipal sector. Her experience has included project management, preliminary and detailed design and construction administration as well as regulatory reporting for various infrastructure systems.

Highlights of Experience

- Project management of multi-disciplinary projects that include contractors and third party subconsultants.
- Engineering design of a variety of municipal projects including wastewater collection systems, pump stations, water systems and road works. The projects have included initial funding applications, preliminary design, detailed design, cost estimates, preparation of drawings, tender documents and contract administration.
- Assessment and preparation of servicing studies for water, wastewater and storm systems for future upgrades and/or new developments.
- Various regulatory applications for EPEA and Water Act Approvals, including Amendments and EAB hearing preparation.
- Preparation of environmental reports/programs, as required by the provincial waterworks approvals process, including source water monitoring, source water protection plan, risk assessment, remedial action plan and overseeing monthly and annual reporting.
- Resident Engineer on several water and wastewater systems as well as daily project management of other installations. Includes communication with on-site inspector, contractors, clients and leading project meetings.

Education

B.A.Sc., Environmental Systems Engineering
University of Regina, 2003

Professional Affiliations

Professional Member
Association of Professional Engineers and Geoscientists of Alberta (APEGA)

Professional History

2018-Present, Project Manager
MPE Engineering Ltd., Calgary, AB

2006-2018, Project Engineer
MPE Engineering Ltd., Calgary, AB

2003-2006, Environmental Engineer
Saskatchewan Department of Property Management, Regina, SK

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PROFESSIONAL EXPERIENCE

MUNICIPAL

- Capital Plan, Village of Cremona.
- Utility Upgrades and Street Improvement Programs, Village of Cremona.
- Goldfinch Raw Water Supply, Wheatland County.
- Aldersyde Water System: Direct Intake, Raw Water Reservoir and Pipelines, Foothills County.
- Lagoon and Lift Station Upgrades, Westend Regional Sewage Services Commission.
- Residual Management Facility Assessment and Design, Town of Three Hills.
- Nanoose Reservoir and Arbutus Pump Station, Regional District of Nanaimo.
- River's Edge Water Supply System, Regional District of Nanaimo.
- CLV Water Main Replacement, Starland County.
- WCWSA Booster Station & Production Well, Regional District of Nanaimo.
- Sunset Underground Infrastructure Replacement, Town of Turner Valley.
- Seclusion Valley Lift Station, Town of Turner Valley.
- Millarville Water Supply - Facilities, Foothills County.
- Direct Intake and Stilling Basin, Sheep River Regional Utility Corporation.
- Turner Valley Water Treatment Plant Upgrades, Quad Regional Water Partnership.

STUDIES/REPORTING

- WTP Assessment, Redwood Meadows.
- Regional Water Supply Studies, Starland County.
- Stormwater Management Plan, Summer Village of Horseshoe Bay.
- H_2S Mitigation Study, Calgary Airport Authority.
- RFP document preparation for Public Works and Administration Building, Starland County.
- Conrich and OMNI ASP Servicing Strategies (Wastewater), Rocky View County.
- Groundwater Supply and Water Treatment Concept, Summer Village of Norglenwold.
- Raw Water Source Exploration, Sheep River Regional Utility Corporation.
- Infrastructure Management Plan (Water and Wastewater), Town of Turner Valley.

REGULATORY

- EPEA Waterworks Approval Renewal, Wheatland Regional Corporation.
- EPEA Approval UV Amendment, Square Butte Ranch.
- Aldersyde Raw Water System EPEA Amending Approvals, Foothills County.
- Registration of Water, Wastewater and Stormwater Code of Practices and Water Licence Renewal, Town of Diamond Valley.
- Water Act Intake Approval, Foothills Okotoks Regional Water Partnership (FOWRP).
- Millarville EPEA Code of Practice Registration and Water Act Transfers, Foothills County.
- EPEA and Water Act Approval Transfers, Sheep River Regional Utility Corporation.
- EPEA Approval Renewal, Westend Regional Sewage Services Commission.
- Environmental Monitoring Programs for well water, raw water, site groundwater, sampling/analytical protocols and Remedial Action Plan for Specific Contaminants, Sheep River Regional Utility Corporation.

Colin McNab, P.Eng.

Calgary Region Manager

Mr. McNab currently serves as Region Manager for the Calgary Office. Overall, he has 28 years of municipal experience and has served as Project Manager on numerous development and municipal projects, including regional planning, feasibility studies, area structure plans, preliminary and final design, quality assurance, and stormwater management. His extensive experience in all phases of municipal engineering is valuable in providing overall support for projects within the Calgary Region.

Highlights of Experience

- As Calgary Region Manager, Mr. McNab is responsible for carrying out all office administration functions, as well as providing oversight for municipal and infrastructure projects. He directs and manages a staff of over 70 personnel ensuring standardization, quality checks, scheduling, as well as leading corporate business development in the provision of engineering services.
- As Region Manager for the MPE Medicine Hat office, Mr. McNab was responsible for carrying out all office administration functions, as well as managing many municipal engineering and infrastructure projects. He fostered the success and consistent growth of the Medicine Hat MPE Team since 2003, from original staff of three to fourteen in 2012.
- Along with Mr. McNab's role as the Calgary Region Manager, he also maintains his role as Municipal Services Vice President for MPE. In this role, Colin works with other region managers regarding general growth, ventures into new markets, overall QA/QC within the municipal sector, general resourcing and staff requirements and other corporate business development opportunities. As Vice President, Mr. McNab also has the opportunity to collaborate with other Englobe companies to utilize additional resources and expand our service offerings to our clients.
- Acts as the Corporate Representative and Point of Contact for clients that have a Master Servicing Agreement or Standing Offer.
- Participates in all phases of engineering projects from feasibility analysis through to detailed design.
- Provides support for all phases of engineering design for Municipal Projects including urban and regional distribution systems, sanitary sewer collection systems, stormwater management, transportation projects (urban and rural), and Infrastructure Master Plans.
- Assists municipalities with applications for both regulatory approvals and funding applications.
- Advises multiple municipalities on partnering in regional initiatives and subsequent funding opportunities.

Education

B.Sc., Civil Engineering
University of Calgary, 1997

Professional Affiliations

Professional Member
Association of Professional Engineers and Geoscientists of Alberta (APEGA)

Professional History

2012-Present, Calgary Region Manager
MPE Engineering Ltd., Calgary, AB

2003-2012, Medicine Hat Region Manager
MPE Engineering Ltd., Medicine Hat, AB

1997-2003, Project Engineer
MPE Engineering Ltd., Calgary, AB

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PROFESSIONAL EXPERIENCE

MUNICIPAL

- Local and Regional Servicing Strategies, Rocky View County.
- Foothills Okotoks Regional Raw Water Supply System, Town of Okotoks and Foothills County.
- Raw Water Reservoir and Water Supply Study, Aldersyde, Foothills County.
- 2018-2020 Water and Sanitary Replacements, Town of High River.
- Lagoon Site Restoration and Reclamation, Town of High River.
- Fish Creek Ranch, Regional Water Expansion Studies, Foothills County.
- Millarville Regional Water Expansion Prelim, Detailed Design and Implementation, Foothills County.
- Hamlets of Blackie and Cayley, Valve Replacements, Foothills County.
- 2015, 2018 Water and Sanitary Replacements, Village of Rockyford.
- Preliminary Design, Governance, and Funding Procurement, Wheatland Regional Corporation.
- Main Lift Station Upgrades, City of Airdrie.
- Hamlets of Blackie and Cayley 2012 Water Distribution Upgrades, Foothills County.
- Hamlet of Cayley, Raw Water Decommissioning, Foothills County.
- 1 Street SE Infrastructure Upgrade, City of Medicine Hat.
- Connaught Infrastructure Upgrade, City of Medicine Hat.
- Northwest Industrial Water Trunk, City of Medicine Hat.
- South Boundary Road Improvements, City of Medicine Hat.
- Southlands Sanitary Sewer Trunk, City of Medicine Hat.
- River Crossing Project, City of Medicine Hat.
- Hamlet of Acadia Valley, Regional Water Supply Pipeline, M.D. of Acadia.

STORMWATER

- CSMI–Stage 2-S Detailed Design.
- CSMI–Stage 1-S Detailed Design and Construction.
- CSMI–Stormwater Management Stage Development.
- CSMI–Governance Feasibility, Regulatory Assessment, Funding Procurement and Project Management.
- Landfill Stormwater Management, City of Medicine Hat.
- Ranchlands Wetlands, City of Medicine Hat.
- 7 Street Preliminary Engineering, City of Medicine Hat.
- North Side Stormwater Plan, Town of Coaldale.

LAND DEVELOPMENT

- Grey Eagle Casino Expansion, Site Servicing and Upgrading.
- Hamlet of Nordegg, Subdivision, M.D. of Clearwater.
- Residential Subdivision (92-lot), Town of Hanna.
- 198-Lot Subdivision in the City of Medicine Hat.
- 34-Lot Manufactured Home Subdivision in the Town of Bow Island.
- 23-Lot Subdivision Function Servicing Plan in the Hamlet of Acadia Valley.

Dave Merrick, B.Sc.
GIS Analyst

Mr. Merrick has over 18 years experience in the geomatics field. As a GIS analyst, his focus is on developing asset management systems for smaller municipalities using ArcGIS Online, ArcGIS Field Maps and ArcGIS Pro. He also has field data collection experience with RTK GNSS and RPAS systems.

Highlights of Experience

- Involved in all aspects of delivering asset management projects for municipal clients including:
  - ⇒ *Consulting with stakeholders to identify system requirements,*
  - ⇒ *Designing asset database schema to suit client needs,*
  - ⇒ *Compiling base data from many sources (digital, paper, etc.),*
  - ⇒ *Identifying gaps in data and perform field collection as required,*
  - ⇒ *Designing asset inspection templates that conform to client workflows,*
  - ⇒ *Mobile data retrieval and collection setup using ArcGIS Field Maps,*
  - ⇒ *Creating bespoke operations reporting tools using ArcGIS Dashboards to deliver key system metrics,*
  - ⇒ *Planning and delivering system training to municipal staff.*
- Automated tasks such as PCSWMM storage node flood extent creation, storage curve production, data dictionary creation, raster data cataloguing, and thematic map production using ArcPy scripts and ModelBuilder models.
- Expedited the conversion of large storm and sanitary datasets to GIS databases including attribute extraction using FME workspaces.
- Identified areas in storm and sanitary networks requiring CCTV inspection using network tracing and automated the process using ArcGIS Pro ModelBuilder.
- Developed custom webmaps to assist internal clients with day-to-day operations. Created ArcGIS Online webmaps to pull ASCM reports directly from Alberta SPIN2 and catalog raster data on internal servers using custom Arcade expressions and map pop ups.
- Utilized machine learning models for object detection in imagery and text classification in large 311 call datasets.
- Performed field data collection using DJI Phantom 4 RTK. Delivered georeferenced digital terrain models, orthophotos, 3d meshes, point clouds and contours to internal clients. Perform necessary processing of field data using Pix4d.
- Production of GIS data for HEC-RAS modelling as well as large thematic map sets from HEC-RAS model output.

Education

B.Sc., Geography (GIS)
University of Lethbridge, 2015

Geomatics, Associate Degree
Lethbridge College, 2006

Certifications

Civil/Commercial Unmanned Aerial Vehicle Certificate
Canadian Unmanned Incorporated

Basic Pilot Certificate for UAV Operations
Transport Canada

Professional History

2021-Present, GIS Analyst
MPE Engineering Ltd., Calgary, AB

2019-2021, Geographic Information Systems Technician
Stantec Inc., Calgary, AB

2016-2018, Crew Chief
Midwest Surveys Inc., Lethbridge, AB

2007-2014, Crew Chief
Martin Geomatic Consultants Ltd., Lethbridge, AB

2007-2016, Master Bombardier, 20th Independent Field Battery
Canadian Armed Forces

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PROFESSIONAL EXPERIENCE

GIS ASSET MANAGEMENT

- Crossfield Asset Management Program, Town of Crossfield, AB.
- Delburne Asset Management Program, Village of Delburne, AB.
- FLCN Infrastructure Asset Management, Fox Lake Cree Nation, MB.
- Beiseker Asset Management Program, Village of Beiseker, AB.

FLOOD RISK MAPPING

- Priddis Flood Hazard Study, Alberta Environment and Parks, Priddis, AB.

IRRIGATION

- Westside Irrigation Rehabilitation Project, Water Security Agency/Prairie Engineering Partners.
- Luck Lake Irrigation Expansion—Area 5, Water Security Agency.
- Macrorie Irrigation Expansion, Water Security Agency.

SANITARY/STORMWATER MANAGEMENT

- CDI North - Pineridge Dry Pond B and Storage Duct #2, City of Calgary, Calgary, AB.
- Palliser Oakridge CDI, City of Calgary, Calgary, AB.
- Loop 375 Border Highway West Extension, Texas Department of Transportation, El Paso, Texas.
- Napier Stormwater Study, Napier City Council, Napier, New Zealand.
- Belvedere Area Structure Plan, City of Calgary, Calgary, AB.
- Greenline LRT, City of Calgary, Calgary, AB.

CONSTRUCTION SURVEY

- Grande Prairie Mainline Loop No. 2 McLeod River Section, TCPL, Edson, AB.
- Picture Butte Distribution Pipeline, ATCO Gas, Picture Butte, AB.
- Taber Drainage Improvements, M.D. of Taber, Taber, AB.

Todd Lockie

Field Manager/Senior Technologist

Mr. Lockie has more than 35 years of pavement management experience throughout North America with a focus on transportation and infrastructure projects. Todd has worked with a wide-range of pavement management software and has provided successful integration of the assessment data information.

Highlights of Experience

- As Field Manager for the Transportation department's pavement management team in Edmonton, Mr. Lockie is responsible for overseeing the data collection for each project. As part of this role, he implements the following:
  - Preparation of Geographic Information System (GIS) mapping components required for data collection work.
  - Pavement data collection.
  - Formatting and uploading of collected data.
  - GIS data interface and software implementation.
  - Client training and support services.
- Mr. Lockie is responsible for quality control of the data collection equipment including:
  - Equipment calibration checks.
  - Field review of data collection for network coverage and complete data sets.
  - Data collection equipment development.

Education

Civil Engineering Technician
Mohawk College of Applied Arts and Technology, 1989

Certification

ICC/Operation/Maintenance of Profiler
ESRI Canada

Professional History

2014—Present, Field Manager/Senior Technologist
MPE a division of Englobe, Edmonton, AB

2010—2014, Field Manager/Senior Technologist
DCL Siemens Engineering Ltd., Edmonton, AB

1993—2010, Field Manager/Senior Technologist
Stantec Consulting Ltd., Edmonton, AB and Cambridge, ON

1988—1993, Field Technician
Pavement Management Systems (PMS), Cambridge, ON

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PROFESSIONAL EXPERIENCE

PAVEMENT & SIDEWALK DATA COLLECTION, ASSESSMENT, REPORTING AND SUPPORT, GIS IMPLEMENTATION

- Pavement Data Collection, Assessment and Reporting—Sidewalk Imagery Survey, City of Saskatoon.
- Pavement Data Collection, Assessment and Reporting, City of Spruce Grove.
- Pavement Data Collection, Assessment and GIS Updates, Town of Okotoks.
- Pavement Data Collection, Assessment and Reporting, Town of Olds.
- Pavement Data Collection, York Region and Municipalities. ON.
- Pavement Data Collection, Town of Aurora, ON.
- RoadMatrix Pavement Condition Data Collection Update, City of North Bay.
- Pavement Data Collection, Assessment and Reporting, City of Red Deer.
- Pavement Data Collection, Assessment and Reporting, City of Leduc.
- Pavement Data Collection, Assessment and Annual Reporting, Golden Ears Bridge Project, BC.
- Pavement and Gravel Data Collection, Sidewalk Survey, Assessment and Reporting, County of Grande Prairie.
- Pavement Data Collection, Assessment and Reporting, Town of Ponoka.
- Pavement Data Collection, Assessment and Reporting, Town of Drumheller.
- Sidewalk and Trail Data Collection, Assessment and Reporting, City of Grande Prairie.
- Pavement Data Collection, Sidewalk Survey, Assessment and Reporting, Town of Nobleford.
- Pavement Data Collection, Sidewalk Survey, Assessment and Reporting, Town of Taber.
- Pavement Data Collection, Sidewalk Survey, Assessment and Reporting, Town of Bruderheim.
- Pavement Data Collection, Sidewalk Survey, Assessment and Reporting, Town of Coronation.
- Pavement Data Collection, Sidewalk Survey, Assessment and Reporting, Town of Fox Creek.
- Pavement Data Collection, Sidewalk Survey, Assessment and Reporting, Village of Arrowwood.
- Pavement Data Collection, Sidewalk Survey, Assessment and Reporting, Village of Lomond.
- Pavement Data Collection, Sidewalk Survey, Assessment and Reporting, Village of Cowley.
- Pavement Data Collection, Sidewalk Survey, Assessment and Reporting, Town of Viking.
- Pavement Data Collection, Assessment and Reporting, Town of Stony Plain.
- Pavement Data Collection, Sidewalk and Trail Survey, Assessment and Reporting, Town of Westlock.
- Pavement Data Collection, Assessment and Reporting, Town of Coaldale.
- Pavement Data Collection, Sidewalk Survey, Assessment and Reporting, Town of Mayerthorpe.
- GIS Network Development and Implementation, Town of Mayerthorpe.
- Pavement Data Collection, Assessment and Reporting, Town of Vegreville.
- GIS Network Development and Implementation—GIS Training, Town of Vegreville.
- Pavement Data Collection, Sidewalk Survey, Assessment and Reporting, City of Brooks.
- Pavement Data Collection, Sidewalk Survey, Assessment and Reporting, Village of Holden.
- Pavement Data Collection, Sidewalk Survey, Assessment and Reporting, Village of Waskatenau.
- Pavement Data Collection, Sidewalk Survey, Assessment and Reporting, Village of Vilna.
- Pavement Data Collection, Assessment and Reporting, Town of Onoway.
- Pavement Data Collection, Assessment and Reporting, Village of Spring Lake.
- Pavement Data Collection, Sidewalk Survey, Assessment and Reporting, Town of Smoky Lake.
- Pavement Data Collection, Sidewalk Survey, Assessment and Reporting, Town of St. Paul.
- QA/QC, FWD and LWD Testing and Reporting, Northeast Anthony Henday Project.

Professional Experience

Pavement & Sidewalk Data Collection, Assessment, Reporting and Support, GIS Implementation (Continued)

Provincial Pavement Data Collection

- Alberta Infrastructure and Transportation.
- British Columbia Ministry of Transportation.
- Ministry of Transportation Ontario.
- Saskatchewan Ministry of Transportation and Highways.

Pavement Data Processing

- Data Processing, Bay County, FL; City of Conroe, TX.
- Data Processing, City of Newcastle, WA; City of Helotes, TX; City of Pittsburgh, PA; City of Colorado Springs, CO; Adams County, CO; City of Keene, NH; City of Norfolk, VA; City of Industry, CA; City of Redwing, MN.
- Data Processing, Orange County, CA; City of Hemet, CA; City of San Diego, CA; San Diego County, CA; Manhattan Beach, CA; City of Diamond Bar, CA; Richland County, SC; Lincoln, NE.

Gerald Papworth, P.Eng.

Senior Project Manager

Mr. Papworth is a Senior Project Manager with the electrical, instrumentation and controls group of engineers in the Calgary office. He has 38 years' experience in the detailed design, construction and implementation of electrical engineering, automation and instrumentation in the municipal and power generation industries.

Highlights of Experience

- Developing design standards for electrical, instrumentation and controls.
- Designing power distribution and lighting layouts for water treatment plants, sewage treatment plants, pump stations and lift stations.
- Designing automation and control systems for water treatment plants, sewage treatment plants, pump stations and lift stations.
- Designing Supervisory Control And Data Acquisition (SCADA) systems for municipalities, water commissions and First Nations customers.
- Designing electric heat trace systems for water and wastewater piping.
- Coordinating controls and electrical support for customer water utilities operations and maintenance.
- Representing owner on electrical and controls aspects through the design, construction and commissioning of a cogeneration plant at the Shell Oilsands Upgrader in Fort Saskatchewan.
- Participating as Project Technical Lead on design and installation of a Distributed Control System (DCS) in the Clover Bar Power Plant.
- Acting as design engineer, contract administrator, operations & maintenance engineer at the Sheerness Power Plant.

Education

B.Sc., Electrical Engineering
University of Alberta, 1987

Professional Affiliations

Professional Member
Association of Professional Engineers and Geoscientists of Alberta (APEGA)

Professional History

2004-Present, Senior Project Manager
MPE Engineering Ltd., Calgary, AB

2001-2004, Senior Instrumentation/Controls/ Electrical Engineer
ATCO Power, Calgary and Fort Saskatchewan, AB

1996-2000, Senior Instrumentation/Controls Engineer
GKO Engineering/Colt Engineering, Edmonton, AB

1987-1996, Instrumentation/Electrical Engineer
Alberta Power Limited, Edmonton and Hanna, AB




PROFESSIONAL EXPERIENCE

WATER/WASTEWATER TREATMENT

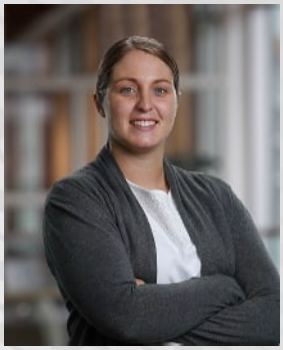
- Regional Raw Water Supply, Town of Okotoks/Foothills County.
- Goldfinch Raw Water Supply, Wheatland County.
- Pump Station Upgrades, Water Treatment Residuals Lift Station Addition, Town of Three Hills.
- Lift Station Addition, Truckfill Upgrade, Paintearth County.
- Controls/SCADA Upgrades, Gleniffer Lake Resort.
- Christina Lake, Foster Creek, Sunrise Water & Wastewater Facility Assessments, Cenovus.
- Water Metering Vault Upgrades, Sanitary Trunk Manhole Monitoring, Odour Control, City of Calgary.
- Wastewater Treatment Plant Flow Monitoring; Mountview, Glendale, Lancaster, Clearview Pump Station Upgrades, City of Red Deer.
- Booster Station Upgrade, Town of Drumheller.
- Wastewater Treatment Upgrade, Westend Regional Sewage Services Commission.
- Nordegg Commercial Septage Receiving, RV Servicing, Water Metering, Clearwater County.
- Whiskey Creek Water Treatment Plant Upgrade, Fairwinds Reservoir Addition, Regional District of Nanaimo.
- Truckfill Upgrades, SCADA, Millarville, Blackie Station, Aldersyde Reservoir and Pump Station, Fish Creek Ranch Water Treatment Plant, Cayley Station and Booster, Heritage Heights Arena, Foothills County.
- WTP Expansion, Raw Water Pump Station and Delivery Point Upgrades for Gleichen, Rockyford, Rosebud, Wheatland Regional Corporation.
- WTP Controls and SCADA Upgrade, WTP Generator, UV Disinfection, Raw Water Generator, SCADA Communication Upgrades, Henry Kroeger Regional Water Commission.
- East Balzac Water Treatment Plant, Balzac Reservoir & Pump Station, Conrich Reservoir & Pump Station, Bragg Creek Water Treatment Plant and Wastewater Treatment Plant, Dalroy Lift Station, Rocky View County.
- Morrin, Munson, Craigmyle, CLV Pump Stations Upgrades for Regional Water Distribution, Starland County.
- Water Treatment Plant Controls Upgrade and Expansion, SCADA Upgrades, Sheep River Regional Utilities Corporation.
- Morley Wastewater Treatment Plant, Eden Valley Water System Upgrades and Sewage Treatment, Nakoda Entertainment Resort Water and Wastewater Treatment Plants, Bighorn Water Supply System and Sewage Treatment, Stoney Tribal Administration.

INFRASTRUCTURE/SITE DEVELOPMENT

- Airport Lighting Upgrades: Consort, Oyen, Drumheller, Foothills County.
- Waste Transfer Station, Whitefish Lake First Nation.
- Electrical Standards Development, Control Network Upgrade, Edmonton Waste Management Centre.
- Bow River Irrigation District Drop 3 Hydro Generator Site Electrical Design, Natel Energy.
- Airport Apron De-icing Diversion Chamber Design Review, Calgary Airport Authority.
- B.C. Hydro Site C Raw Water Pump Station, Peace River Hydro partners.
- Non-process Facility Electrical Standard, Richardson Camp Site Servicing including power, fiber, potable water pump station, sewage lift station, security access control, video monitoring, and outdoor lighting, Canadian Natural Resources Ltd.
- Stormwater Lift Stations: Edmonton Terminal, Keyera; Foster Creek, Cenovus.
- South Tailings Pond Seepage Pump Station (5KV 400HP Pumps), Suncor.
- Heritage Heights Arena Ice Melt Water Recycling, Foothills County.
- Downtown Plaza Power & Lighting, Town of Drumheller.

Tayler Marra, P.Eng.

Stormwater Team Lead



Ms. Marra has 11 years' municipal experience and is involved with the construction, inspection and preliminary design work of stormwater and water resources projects. She has completed site-specific stormwater management designs (swales, pipes, ponds, wetlands) for developers and municipalities in and around Calgary.

Highlights of Experience

- Stormwater modelling of dual drainage systems.
- Models used: PCSWMM, XPSWMM, HEC-RAS.
- Technical report preparation.
- Use of topographic surveys and natural drainage paths for the development of master drainage plans.
- Underground utility assessment of storm, sanitary and potable water systems at the University of Calgary.
- Prepared various Alberta Environment and Protected Areas Applications under the Water Act and EPEA.
- Preparation of multiple regional planning documents for the Cooperative Stormwater Management Initiative.
- Resident Engineer for various projects in the Calgary region. This includes ensuring construction is carried out to specification, detailed reporting of work completed and maintaining communication with the contractor, client and public.
- Project Management of various municipal construction and stormwater design projects.

Education

B.Sc., Civil Engineering
University of Calgary, 2014

Professional Affiliations

Professional Member
Association of Professional Engineers and Geoscientists of Alberta (APEGA)

Professional History

2023-Present, Stormwater Team Lead
MPE Engineering Ltd., Calgary, AB

2014-2023, Project Engineer
MPE Engineering Ltd., Calgary, AB

2012-2013, Civil Engineering Intern
MPE Engineering Ltd., Calgary, AB

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PROFESSIONAL EXPERIENCE

STORMWATER PLANNING, MODELLING AND DESIGN

- Palliser/Oakridge CDI, City of Calgary.
- Pineridge Dry Pond B, City of Calgary.
- Great Plains/Starfield—50 51 Avenue Crossings and Dam Safety Assessment, Real Estate and Development Services.
- Regional Stormwater Studies—Town of Taber, Town of Fort Macleod, Town of Fox Creek, Village of Holden, Village of Mannville, Smoky Lake County, Village of Beiseker, Summer Village of Mewatha Beach, Town of Bruderheim, Village of Cremona, Hamlet of La Crete.
- Great Plains/Starfield Staged Master Drainage Plan and Pond Reports, Real Estate and Development Services.
- Northwest Inner City Stormwater Improvements, City of Calgary.
- CSMI Regional Stormwater Guidelines, Monitoring Program, Modelling and Stage Development, LID Research.
- Six Mile Coulee, Tiffin Drain Master Drainage Plan, Lethbridge County.
- RVC Master Drainage Plans (Janet, Conrich, Omni).
- McKenzie Towne and New Brighton School Stormwater Management Report, Calgary Board of Education.
- Glenmore Trail Feasibility Study, Rocky View County.
- Windhorse Stormwater Management Review, Rocky View County.
- Soil Cell Guidelines, City of Calgary.
- Aspen Springs Staged Master Drainage Plan, Slokker Canada West Inc.
- CSMI Belvedere Connection, City of Calgary.
- Springbank Creek MDP Floodplain Mapping and Channel Improvements, Rocky View County.
- Sexsmith Drainage Improvements.
- Bar W Campground Stormwater Analysis.
- Calaway Park Parking Lot Stormwater Management Report, Calalta Amusements Ltd.

INFRASTRUCTURE STUDIES AND DESIGN

- Main Replacement Program (2016-2018), High River.
- Elkana Water Service Replacement, Rocky View County.
- University of Calgary Campus Underground Utilities Assessment.
- Morley Culvert Replacements, Stoney Tribal Administration.
- Osler Road Rehabilitation, Crossfield.
- CSMI Preliminary Design and Costing.
- Red Deer River Watershed Availability Study, Western Irrigation District.

PROJECT ENGINEER

- Lac La Biche Bold Center Sports Field Expansion Phase 1 and 2, Lac La Biche County.
- Aldersyde Transportation Services—Parking Lot Expansion, Foothills School Division.
- Lac La Biche Bold Center Campground, Lac La Biche County.
- Elbow Valley School Drainage Improvements, Rocky View Schools.

Appendix B

Project Profiles

Village of Cereal
Infrastructure Management Plan

The study assessed the condition of the existing infrastructure's ability to meet existing and future demands and conformance to current standards. A GIS database was developed to assist in the evaluation and prioritization of infrastructure needs for the roads, water distribution, sanitary collection and storm sewer systems. Infrastructure needs were then consolidated into a 10-year capital works program to ensure work is completed in a coordinated and cost effective manner.

Risk Matrix

Importance						
	5	6	7	8	9	10
	4	5	6	7	8	9
	3	4	5	6	7	8
	2	3	4	5	6	7
	1	2	3	4	5	6
		1	2	3	4	5
		Condition				

LOCATION:
Cereal, AB

OWNER:
Village of Cereal
Phone: 403-326-3823

PROJECT TIMELINE:
December 2018—2019

KEY MPE STAFF:
- Mark Steffler, P.Eng.
- Dan Modderman, P.Eng.
- Pierce Mimura, E.I.T.

SERVICES PROVIDED:
- Assigned capital asset values to infrastructure asset inventory
- Assessed conditions of roads, water and sewer infrastructure
- Correlated deep utility priorities with surface work priorities to provide a 10-year, ranked, overall infrastructure capital plan for the Village for long-term capital plan

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Village of Delburne
Infrastructure Master Plan

Project involved an overall master plan for identification of infrastructure deficiencies and development of strategies to address the deficiencies along with priorities and timelines for implementation.

LOCATION:
Delburne, AB

OWNER:
Village of Delburne
Phone: 403-749-3606

PROJECT TIMELINE:
May 2009—February 2010

KEY MPE STAFF:
- Peter Stevens, P.Eng.
- Mike Breunig, P.Eng.

SERVICES PROVIDED:
- Evaluation of Infrastructure
- Development of Master Plan for Infrastructure Upgrades

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Town of Daysland
Infrastructure Management Plan

Project included preparing an Infrastructure Management Plan and 20-Year Capital Plan, providing a cursory review of the state and capacity of the Town's municipal infrastructure including the water, sanitary sewer, as well as the road network, and considers expansion requirements to accommodate anticipated future growth. This plan also provides an upgrading/ maintenance schedule which can be used for the Town's budgeting purposes.

LOCATION:
Daysland, AB

OWNER:
Town of Daysland

PROJECT TIMELINE:
May 2023—Present

STUDY COST:
$200,000

KEY MPE STAFF:
- Chris George, P.Eng.
- Taylor Sunderman, P.Eng.
- Todd Lockie
- Kevin Kwon, E.I.T.
- Amanda Myers, E.I.T.

SERVICES PROVIDED:
- Data Acquisition
- Site Inspection
- Condition and Capacity Assessment
- 20-year Capital Plan
- Comprehensive Report

MPE
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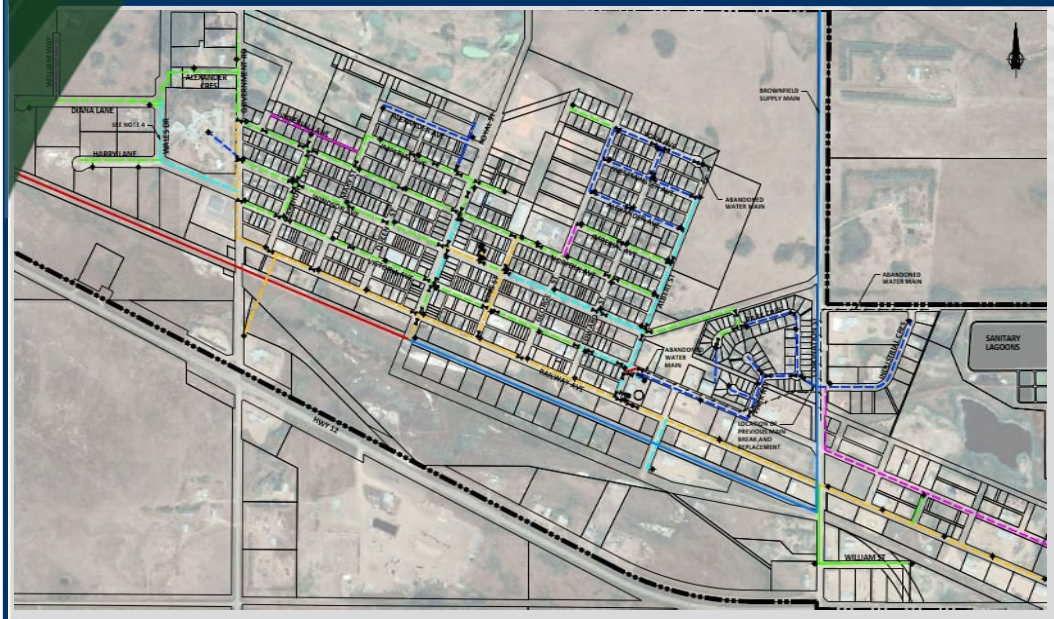
Town of Coronation
Infrastructure Management Plan

Project involved identification of deficiencies and prioritized capital upgrade projects for all infrastructure components to create a 20-year Capital Plan, complete with a cost estimate. The focus of the study was to review and assess the condition and capacity of Town-owned capital assets including water infrastructure, sanitary sewer infrastructure, stormwater infrastructure, and transportation infrastructure.



LOCATION:
Coronation, AB

OWNER:
Town of Coronation

PROJECT TIMELINE:
August 2022—Present

STUDY COST:
$200,000

KEY MPE STAFF:
- Chris George, P.Eng.
- Taylor Sunderman, P.Eng.
- Todd Lockie
- Lexi Sparrow, E.I.T.

SERVICES PROVIDED:
- Data Acquisition
- Site Inspection
- Condition and Capacity Assessment
- 20-year Capital Plan
- Comprehensive Report

MPE
a division of Englobe

Village of Big Valley
Infrastructure Management Plan

Project involved a geotechnical investigation of the Village-owned Sanitary Lagoon and the identification of deficiencies and prioritization of capital upgrade projects for all infrastructure components to create a 20-year Capital Plan, complete with a cost estimate.

LOCATION:
Big Valley, AB

OWNER:
Village of Big Valley

PROJECT TIMELINE:
June 2023—Present

STUDY COST:
$225,628

KEY MPE STAFF:

- Chris George, P.Eng.
- Taylor Sunderman, P.Eng.
- Trevor Curtis, P.Eng.
- Wendy Sung, P.Eng., LEED A.P.
- Todd Lockie
- Kevin Kwon, E.I.T.
- Amanda Myers, E.I.T.

SERVICES PROVIDED:

- Data Acquisition
- Site Inspection
- Condition and Capacity Assessment
- 20-year Capital Plan
- Comprehensive Report

MPE
a division of Englobe

Village of Bittern Lake
Infrastructure Audit

Project involved identification of deficiencies and prioritized capital upgrade projects for all infrastructure components to create a 20-year Capital Plan, complete with a cost estimate. The scope involved reviewing the condition and capacity of all Village-owned capital assets including water and sanitary infrastructure, storm water infrastructure, road systems, buildings, solid waste transfer site, and vehicles.

LOCATION:
Bittern Lake, AB

OWNER:
Village of Bittern Lake

PROJECT TIMELINE:
May 2024 —Present

STUDY COST:
$119,800

KEY MPE STAFF:
- Chris George, P.Eng.
- Taylor Sunderman, P.Eng.
- Todd Lockie
- Wendy Sung, P.Eng., LEED A.P.
- Amanda Myers, E.I.T.

SERVICES PROVIDED:
- Data Acquisition
- Site Inspection
- Condition and Capacity Assessment
- Phase 1 ESA
- 20-year Capital Plan
- Comprehensive Report

MPE
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Town of Trochu
Infrastructure Master Plan

Project involved the assessment of the Town's existing key infrastructure including water supply, storage, and distribution (using WaterCAD); wastewater collection, treatment and disposal; stormwater collection and treatment; and roadways, sidewalks, curbs and gutters.

LOCATION:
Trochu, AB

OWNER:
Town of Trochu
Phone: 403-442-3085

PROJECT TIMELINE:
July 2009—November 2010

KEY MPE STAFF:
- Mike Breunig, P.Eng.
- Brent Robertson, P.Eng.
- Peter Stevens, P.Eng.
- Jason Klein, P.Eng.
- Steve Dundar, P.Eng.

SERVICES PROVIDED:
- Analysis and system modelling
- Preliminary design
- Planning and cost estimating
- Prioritization of upgrades
- Preparation of a multi-year capital budget

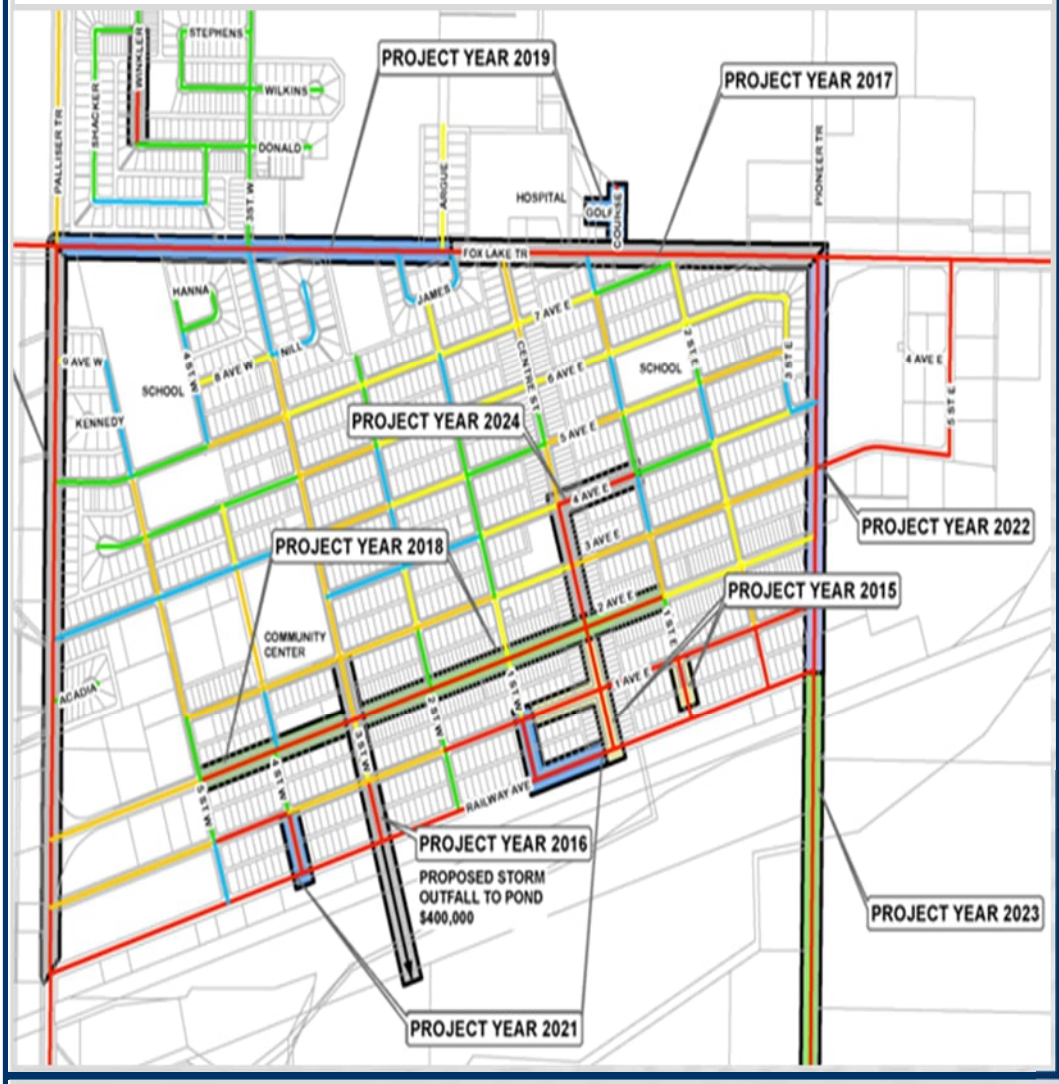
MPE
a division of Englobe

Town of Hanna
Infrastructure Management Plan Study

The study assessed the condition of the existing infrastructure's ability to meet existing and future demands, and conformance to current standards. A GIS database was developed to assist in the evaluation and prioritization of infrastructure needs for the roads, water distribution, sanitary collection and storm sewer systems. Each of the infrastructure needs were then consolidated into a prioritized 10 year capital works program to ensure work is completed in a coordinated, cost effective manner.

Risk Matrix

Importance		Condition				
	5	6	7	8	9	10
	4	5	6	7	8	9
	3	4	5	6	7	8
	2	3	4	5	6	7
	1	2	3	4	5	6
		1	2	3	4	5



LOCATION:
Hanna, AB

OWNER:
Town of Hanna
Phone: 403-854-4433

PROJECT TIMELINE:
October 2013—October 2014

KEY MPE STAFF:
- Mark Steffler, P.Eng.
- Steve Dudar, P.Eng.
- Meaghan Benoit, C.E.T.

SERVICES PROVIDED:
- Roads Assessment
- Water Distribution System Analysis
- Wastewater Collection System Coordination Assessment
- Stormwater System Assessment
- Prioritization of required rehabilitation projects
- Cost Estimate and 10 year Capital Budget
- Infrastructure Management Plan Final Report

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Village of Consort
Infrastructure Management Plan

Project provided engineering services to assess the condition of the existing sanitary collection system and water distribution system, and providing recommendations for a long-term capital plan.

LOCATION:
Consort, AB

OWNER:
Village of Consort
Phone: 403-577-3623

PROJECT TIMELINE:
January 2013—April 2014

KEY MPE STAFF:
- Chris George, P.Eng.
- Mike Breunig, P.Eng.
- Brandon Wetmore, E.I.T.

SERVICES PROVIDED:
- Review of sanitary main video inspections and provided rankings of main and rehabilitation measures
- Created WaterCAD and Sewer GEMS calibrated models, running current and future scenarios to provide a long range capital plan for upgrade and replacements of the infrastructure

MPE
a division of Englobe

Village of Halkirk
Infrastructure Assessment and 10-Year Capital Plan

Project involved identification of deficiencies and prioritized capital upgrade projects for all infrastructure components to create a 10-year capital plan, complete with a cost estimate.

LOCATION:
Halkirk, AB

OWNER:
Village of Halkirk
Phone: 403-884-2464

PROJECT TIMELINE:
April 2021—October 2021

KEY MPE STAFF:
- Chris George, P.Eng.
- Taylor Sunderman, P.Eng.
- Todd Lockie
- Wendy Sung, P.Eng., LEED A.P.

SERVICES PROVIDED:
- Data Acquisition
- Site Inspection
- Condition and Capacity Inspection
- Phase 1 ESA of Village Property
- 10-year Capital Plan
- Comprehensive Report

MPE
a division of Englobe

Village of Gadsby (Stettler County)

Infrastructure Audit

Project involved identification of deficiencies and prioritized capital upgrade projects for all infrastructure components to create a 10-year capital plan, complete with a cost estimate.

LOCATION:
Gadsby, AB

OWNER:
Village of Gadsby c/o Stettler County
Phone: 403-742-4441

PROJECT TIMELINE:
March 2019—August 2019

PROJECT COST:
$85,000

KEY MPE STAFF:
- Chris George, P.Eng.
- Taylor Sunderman, P.Eng.
- Greg Sentis, P.L.(Eng.)

SERVICES PROVIDED:
- Data Acquisition
- Site Inspection
- Condition and Capacity Inspection
- Phase 1 ESA of Village Property
- 10-year Capital Plan
- Comprehensive Report

MPE
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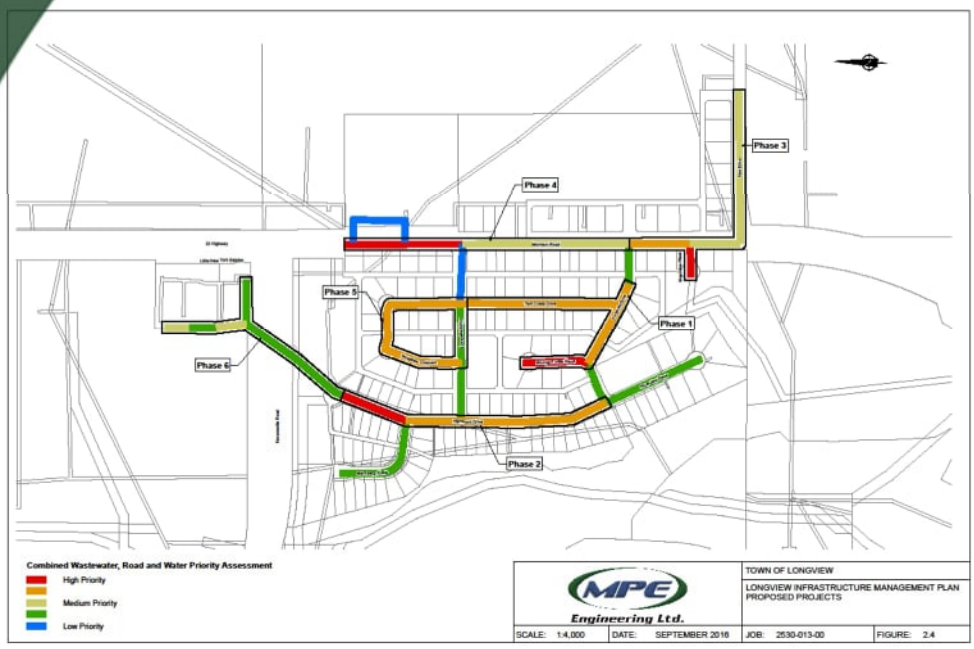
Village of Longview
Infrastructure Management Plan

Project involved sanitary video inspection of 3.5 km of pipeline in the Village of Longview. Also included engineering services to assess the condition of the sanitary collection system and lagoons, assessment of water treatment and distribution stormwater system and roads, and providing recommendations for a long-term capital plan.



LOCATION:
Longview, AB

OWNER:
Village of Longview
Phone: 403-558-3922

PROJECT TIMELINE:
June 2016—September 2016

KEY MPE STAFF:
- Sarah Fratpietro, P.Eng., LEED AP
- Ryan Fitzsimmons, E.I.T.

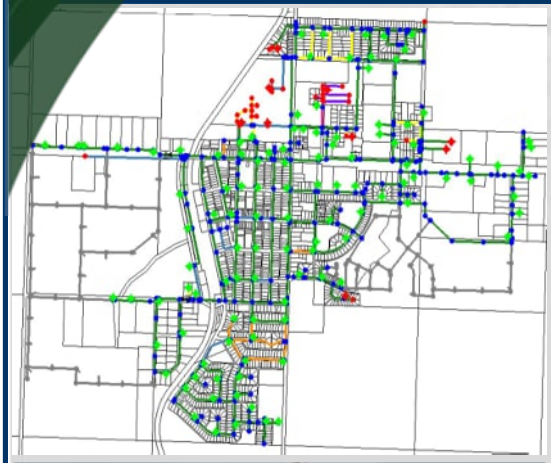
SERVICES PROVIDED:
- Reviewed sanitary main video inspections and provided rankings of condition
- Reviewed and assessed condition and capacity of water system, wastewater system, stormwater system and roads
- Prepared infrastructure base maps and condition maps
- Prepared a report to summarize findings and recommendations for long-term capital plan

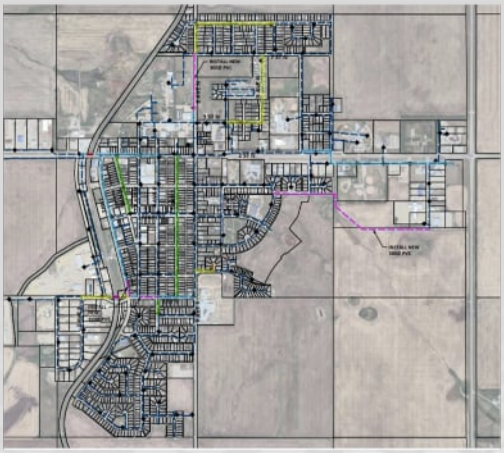
MPE
a division of Englobe

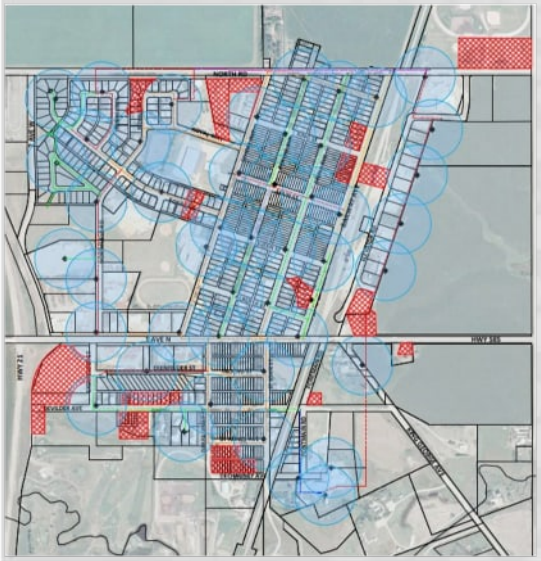
Town of Three Hills
Regional Water Distribution System Study

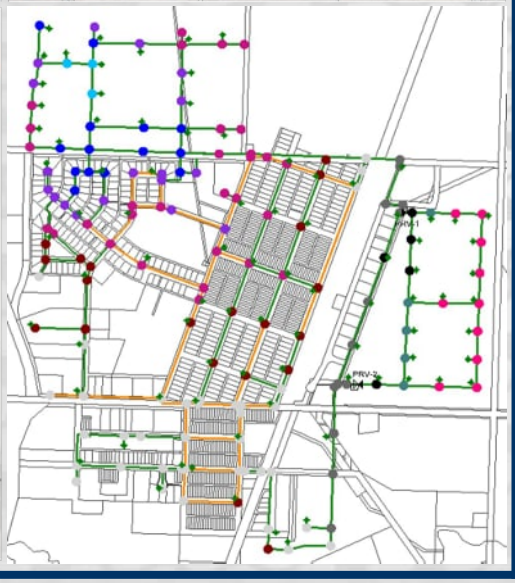
Project involved:

- Potable water system data collection, including survey, flow data, and drawings.
- Creation of a WaterCAD model, including hydrant testing for model calibration.
- Model analysis and development of infrastructure assessment and recommendations.
- Capital plan updates.









LOCATION:
Three Hills, Trochu, & Kneehill County, AB

OWNER:
Town of Three Hills

PROJECT TIMELINE:
April 2022—April 2024

PROJECT COST:
$200,000

KEY MPE STAFF:
- Andrew Simpson, P.Eng.
- Lexi Sparrow, E.I.T.

SERVICES PROVIDED:
- Water Infrastructure Survey
- Record Drawing Review
- Water Meter Data Review
- WaterCAD Model Creation
- Hydrant Flow Testing
- Model Calibration and Analysis
- Assessment of Pressures, Fire Flows, Reservoir Capacity
- System Improvements Recommendations
- Report and Capital Plans

MPE
a division of Englobe

Rocky View County
Balzac Potable Water and Wastewater Master Plan

Project involved completing a Water and Wastewater Master Plan report which included historical water and wastewater flow analysis,

LOCATION:
Rocky View County, AB

OWNER:
Rocky View County
Phone: 403-230-1401

PROJECT TIMELINE:
November 2021—April 2022

PROJECT COST:
$38,000

KEY MPE STAFF:
- Dan Modderman, P.Eng.
- Rick Wiljamaa, P.Eng.

SERVICES PROVIDED:
- Preliminary Design
- Capacity Assessments
- Report

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ROCKY VIEW COUNTY
CONRICH MASTER DRAINAGE PLAN UPDATE

Project involved a study area encompassing approximately 4,100 ha of land bordering the east boundary of the City of Calgary and the Trans-Canada Highway which is to be developed in mix residential, commercial and industrial land uses.

The MDP study developed design guidance and infrastructure servicing requirements for future development, recognizing the limited drainage capacity of the area. The MDP identifies release rates, regional drainage corridors, water quality improvement and potential water reuse opportunities. Modelling of LID practices was a key component with comprehensive continuous simulation hydrological analysis being undertaken. The benefits of incorporating LID practices and how they can assist in managing the water balance needs of sensitive wetlands were provided.

Alternative innovative stormwater management strategies were developed to provide interim servicing solutions for the area including a comprehensive stormwater treatment and reuse strategy. These proposed strategies enable development to proceed with smaller interim facilities, reducing infrastructure costs, increasing the developable area and not being constrained by the limitations of previously conceived schemes.

LOCATION:
Hamlet of Conrich, AB

OWNER:
Rocky View County
Phone: 403-230-1401

PROJECT COMPLETION:
October 2022

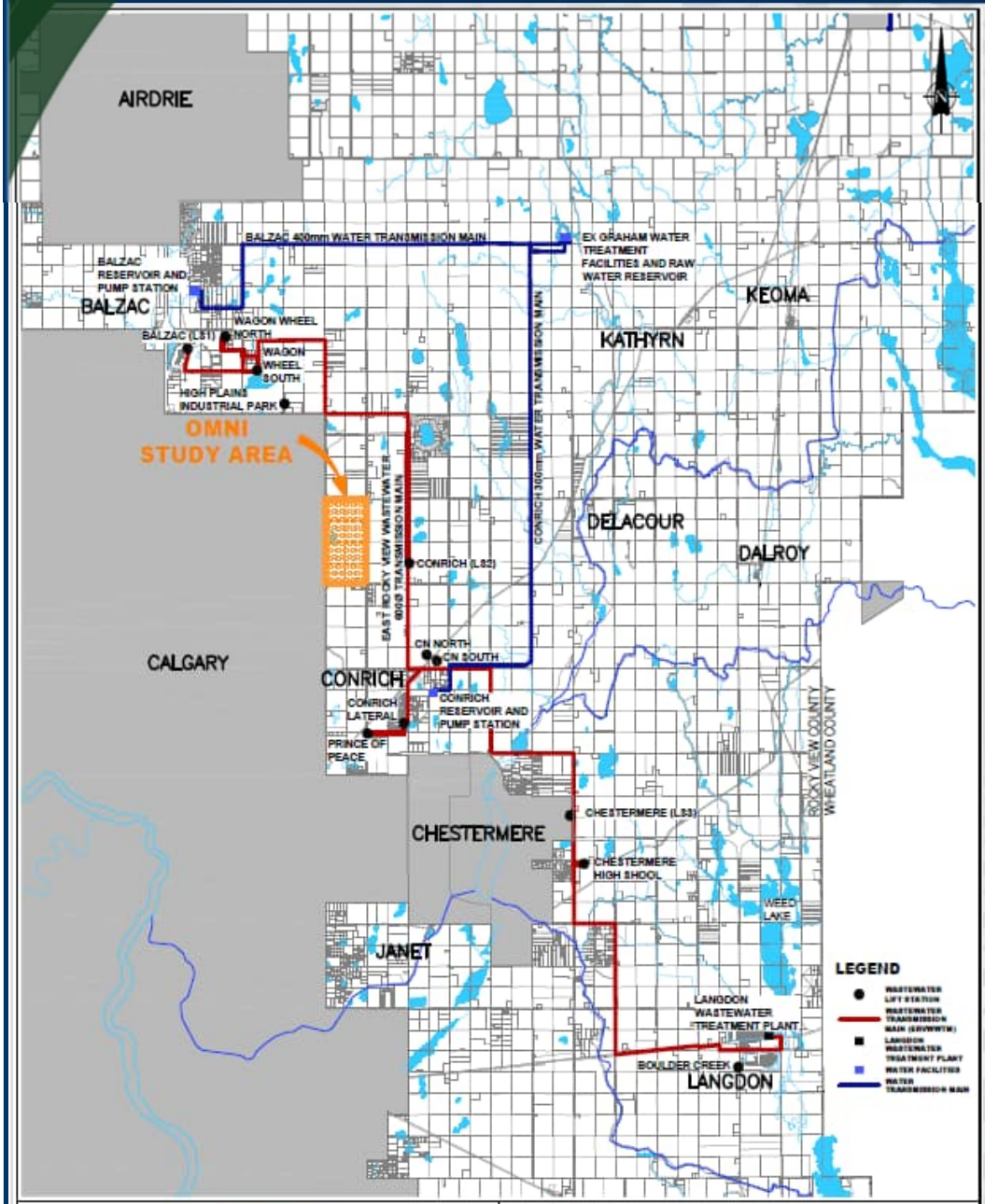
KEY MPE STAFF:
- David Seeliger, P.Eng.
- Tayler Marra, P.Eng.

SERVICES PROVIDED:
- Identify existing drainage concerns and constraints
- Water balance and stormwater modelling of traditional and LID stormwater management practices
- Assess land requirements and infrastructure costs for regional conveyance infrastructure
- Local vs. regional stormwater facilities discussion paper
- Stormwater Reuse Strategy
- Outlining Interim Drainage Options
- Wetland Assessment

MPE
a division of Englobe

ROCKY VIEW COUNTY
OMNI ASP SERVICING STRATEGY

Project involved the development of a servicing strategy for the OMNI ASP area that outlines a logical and staged expansion of water and wastewater services needed for future development. Study included projection of water and wastewater demands, concept design for the water distribution system and wastewater collection system and producing capital cost estimates for the servicing concept.



LOCATION:
Rocky View County, AB

OWNER:
Rocky View County
Phone: 403-230-1401

PROJECT TIMELINE:
March 2017—August 2017

KEY MPE STAFF:
- Sarah Fratpietro, P.Eng.
- Jill Hardy, P.Eng.
- Dan Modderman, P.Eng.

SERVICES PROVIDED:
- Review of existing infrastructure
- Concept design for water and wastewater systems for area build-out
- Cost estimating
- Draft and Final Report

MPE Engineering Ltd.

ROCKY VIEW COUNTY

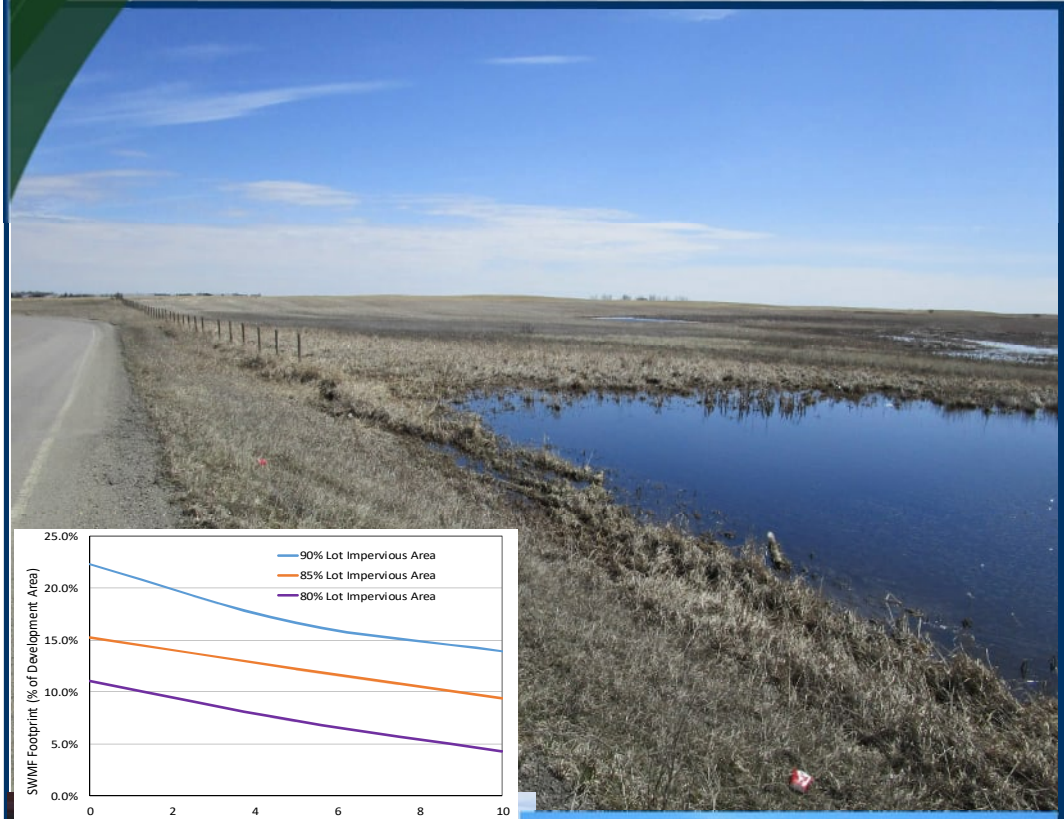
OMNI ASP SERVICING STRATEGY
EXISTING EAST ROCKY VIEW COUNTY REGIONAL WATER AND WASTEWATER SYSTEMS

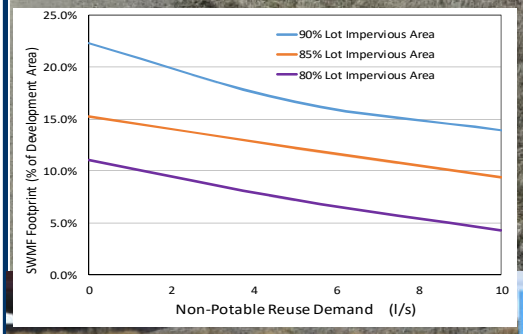
SCALE: 1:200,000	DATE: AUGUST 2017	JOB: 2285-066-00	FIGURE: 1

MPE a division of Englobe

Rocky View County
OMNI Master Drainage Plan

Project involved preparation of a Master Drainage Plan to facilitate future development within the OMNI ASP area. Key aspects included LID sizing and reuse options to meet volume control targets and providing a regional stormwater drainage strategy that would allow connection to the Cooperative Stormwater Management Initiative (CSMI).





LOCATION:
Conrich, AB

OWNER:
Rocky View County
Phone: 403-230-1401

PROJECT TIMELINE:
March 2017—August 2017

KEY MPE STAFF:
- David Seeliger, P.Eng.
- Tayler Marra, P.Eng.
- Meaghan Benoit, C.E.T.

SERVICES PROVIDED:
- Identify existing drainage concerns and constraints
- Culvert Assessments
- Develop a regional stormwater approach considering irrigation and non-potable reuse
- Modelling of stormwater management facilities and LID Practices
- Assess land requirements and infrastructure costs for regional drainage options
- Provide stormwater policies for development

MPE
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VILLAGE OF YOUNGSTOWN
INFRASTRUCTURE MANAGEMENT PLAN

The study assessed the condition of the existing infrastructure's ability to meet existing and future demands and conformance to current standards. A GIS database was developed to assist in the evaluation and prioritization of infrastructure needs for the roads, water distribution, sanitary collection and storm sewer systems. Infrastructure needs were then consolidated into a 10-year capital works program to ensure work is completed in a coordinated and cost effective manner.

Risk Matrix

Importance						
	5	6	7	8	9	10
	4	5	6	7	8	9
	3	4	5	6	7	8
	2	3	4	5	6	7
	1	2	3	4	5	6
		1	2	3	4	5
		Condition				

LOCATION:
Youngstown, AB

OWNER:
Village of Youngstown
Phone: 403-779-3873

PROJECT TIMELINE:
October 2018—April 2019

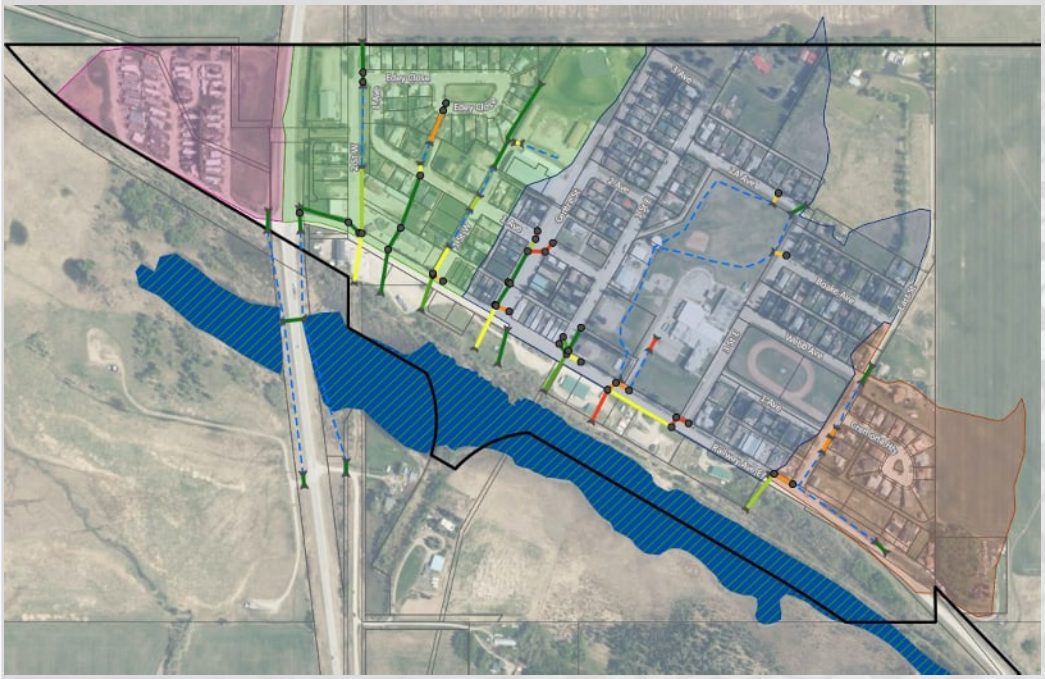
KEY MPE STAFF:
- Mark Steffler, P.Eng.
- Dan Modderman, P.Eng.
- Pierce Mimura, E.I.T.

SERVICES PROVIDED:
- Assigned capital asset values to infrastructure asset inventory
- Assessed conditions of roads, water and sewer infrastructure
- Correlated deep utility priorities with surface work priorities to provide a 10-year, ranked, overall infrastructure capital plan for the Village for long-term capital plan

MPE
a division of Englobe

Village of Cremona
Regional Stormwater Management Plan

Project involved stormwater modelling and analysis of existing drainage systems and proposed improvements in the Village of Cremona. The scope of improvements include the installation and upgrades of pipes, culverts, catchbasins, and road re-surfacing to avoid erosion concerns.



LOCATION:
Cremona, AB

OWNER:
Village of Cremona
Phone: 403-637-3762

PROJECT TIMELINE:
May 2022—November 2023

KEY MPE STAFF:
- Jill Hardy, P.Eng.
- David Seeliger, P.Eng.
- Tayler Marra, P.Eng.
- Timothy Wong, E.I.T.

SERVICES PROVIDED:
- Stormwater modelling
- Infrastructure assessments
- Improvement recommendations
- Cost estimating

MPE
a division of Englobe

Appendix C

Detailed Fee Breakdown/Hourly Rate Schedule

Village of Cremona
Infrastructure Audit
Fee Estimate

MPE a division of Englobe — VILLAGE OF Cremona

		Team Members										FEE TOTAL	DISBURSEMENTS	SUBTOTAL
		Senior Review/ Corporate Representative	Senior Project Manager	Project Manager	Junior Engineer	GIS	Pavement Data Specialist	Electrical Engineer	Stormwater Engineer	Site Survey/Drafting	Admin			
		Colin McNab, P.Eng.	Jill Hardy, P.Eng.	Dan Modderman, P.Eng.		Dave Merrick, B.Sc.	Todd Lockie	Gerald Papworth, P.Eng.	Tayler Marra, P.Eng.	Jason Mendoza, C.E.T.				
		$285	$247	$200	$151	$148	$200	$247	$227	$135	$108			
1	**Project Startup and Admin**													
	General Project Administration			8								$ 1,600		$ 1,600
	Village/Stakeholder Start up Meeting onsite in Cremona		6	6								$ 2,682	$ 400	$ 3,082
	Drone aerial survey and GPS survey of water valves and curb stops			1								$ 200		$ 200
	Survey preparation and post-processing			1						24		$ 3,440	$ 1,600	$ 5,040
	Convert existing CAD drawings to GIS Base Mapping			1		24						$ 3,752		$ 3,752
	Total Hrs	**0**	**6**	**17**	**0**	**24**	**0**	**0**	**0**	**24**	**0**			
	Subtotal	**$0**	**$1,482**	**$3,400**	**$0**	**$3,552**	**$0**	**$0**	**$0**	**$3,240**	**$0**	**$ 12,000**	**$ 2,000**	**$ 14,000**
2	**Sanitary Sewer Assessment**													
	Import GIS and Create Sewer Model			8	8	2						$ 3,104		$ 3,104
	Update Waste Water Demands		1	1	4							$ 1,051		$ 1,051
	Waste Water Modelling			4	8							$ 2,008		$ 2,008
	Evaluate System Upgrade Requirements			2	5							$ 1,155		$ 1,155
	Sanitary Video Co-ordination & Review			1	8							$ 1,408		$ 1,408
	Compile Condition Assessment Summary		1	1	2	8						$ 1,933		$ 1,933
	Wastewater Lagoon Assessment			2	4							$ 1,004		$ 1,004
	Assessment Priority Ranking		1	2	12	4						$ 3,051		$ 3,051
	Improvement Cost Estimates		1	3	6							$ 1,753		$ 1,753
	Total Hrs	**0**	**4**	**24**	**57**	**14**	**0**	**0**	**0**	**0**	**0**			
	Subtotal	**$0**	**$988**	**$4,800**	**$8,607**	**$2,072**	**$0**	**$0**	**$0**	**$0**	**$0**	**$ 16,000**	**$ -**	**$ 16,000**
3	**Water Distribution Assessment**													
	Import GIS and Create Water Model			8	8	2						$ 3,104		$ 3,104
	Update Water Demands			1	4							$ 804		$ 804
	Hydraulic Modeling Existing ADD, MDD, PWF			4	8							$ 2,008		$ 2,008
	Identify Existing System Constraints			2	6							$ 1,306		$ 1,306
	Compile Condition Assessment Summary			1	2	3						$ 946		$ 946
	Pump Station and Reservoir Condition Assessment			2	4			4				$ 1,992	$ 400	$ 2,392
	Assessment Priority Ranking		1	2	12	8						$ 3,643		$ 3,643
	Improvement Cost Estimates		1	3	6							$ 1,753		$ 1,753
	Total Hrs	**0**	**2**	**23**	**50**	**13**	**0**	**4**	**0**	**0**	**0**			
	Subtotal	**$0**	**$494**	**$4,600**	**$7,550**	**$1,924**	**$0**	**$988**	**$0**	**$0**	**$0**	**$ 16,000**	**$ -**	**$ 16,000**
4	**Stormwater Assessment**													
	Import GIS and Develop Model				2	2			4			$ 1,506		$ 1,506
	Confirm Catchment and Drainage Course Delineation		0.5		3	2			1			$ 1,100		$ 1,100
	Storm Water Modeling Overview on 2023 Report		1		2				4			$ 1,457		$ 1,457
	Identify System Constraint, Hot Spots, and Release Rate		1		2	2			4			$ 1,753		$ 1,753
	Confirm System Upgrade Requirement Options		1		2				4			$ 1,457		$ 1,457
	Assessment Priority Ranking		1		2				4			$ 1,457		$ 1,457
	Improvement Cost Estimates		1		6	1			2			$ 1,755		$ 1,755
	Total Hrs	**0**	**6**	**0**	**19**	**7**	**0**	**0**	**23**	**0**	**0**			
	Subtotal	**$0**	**$1,359**	**$0**	**$2,869**	**$1,036**	**$0**	**$0**	**$5,221**	**$0**	**$0**	**$ 10,000**	**$ -**	**$ 10,000**
5	**Roads Assessment**													
	Import GIS					2						$ 296		$ 296
	Roads Condition Assessment		1	1	16	4	10					$ 5,455	$ 2,500	$ 7,955
	Concrete/Sidewalks/Pathways Assessment			1	5	2						$ 1,251	$ 400	$ 1,651
	Evaluate System Upgrade Requirement Options		1	2	6		10					$ 3,553		$ 3,553
	Assessment Priority Ranking		1	2	8	2	12					$ 4,551		$ 4,551
	Improvement Cost Estimates			1	6	1	4					$ 2,054		$ 2,054
	Total Hrs	**0**	**3**	**7**	**41**	**11**	**36**	**0**	**0**	**0**	**0**			
	Subtotal	**$0**	**$741**	**$1,400**	**$6,191**	**$1,628**	**$7,200**	**$0**	**$0**	**$0**	**$0**	**$ 17,000**	**$ 3,000**	**$ 20,000**
6	**Financial Evaluation**													
	Develop Prioritized Work Plan	2	2	6	8							$ 3,472		$ 3,472
	Develop Multi Year Capital Budgets		2	4	16	8	2	2	2			$ 6,242		$ 6,242
	Review Capital and Operating Cost	2	2	3	8		2	2	2			$ 4,220		$ 4,220
	Total Hrs	**4**	**6**	**13**	**32**	**8**	**4**	**4**	**4**	**0**	**0**			
	Subtotal	**$1,140**	**$1,482**	**$2,600**	**$4,832**	**$1,184**	**$800**	**$988**	**$908**	**$0**	**$0**	**$ 14,000**	**$ -**	**$ 14,000**
7	**Report**													
	Preparation Draft Report	2	2	16	32	6	4	2	4		8	$ 13,050		$ 13,050
	Review with Village Staff - half day workshop	6	8	8								$ 5,286	$ 400	$ 5,686
	Preparation of Operating Plan	1	2	16	8			2	2		8	$ 6,999		$ 6,999
	Review with Operating Plan with Village Staff - half day workshop	6	8	8								$ 5,286	$ 400	$ 5,686
	Final Report	2	2	4	16	6	2	2	2		4	$ 6,948		$ 6,948
	Council Presentation	2	8	8								$ 4,146	$ 400	$ 4,546
	Total Hrs	**19**	**30**	**60**	**56**	**12**	**6**	**6**	**8**	**0**	**20**			
	Subtotal	**$5,415**	**$7,410**	**$12,000**	**$8,456**	**$1,776**	**$1,200**	**$1,482**	**$1,816**	**$0**	**$2,160**	**$ 42,000**	**$ 1,000**	**$ 43,000**
	Total hours	**23**	**57**	**144**	**255**	**89**	**46**	**14**	**35**	**24**	**20**			
	Total (Excluding GST)	**$6,555**	**$13,956**	**$28,800**	**$38,505**	**$13,172**	**$9,200**	**$3,458**	**$7,945**	**$3,240**	**$2,160**	**$127,000**	**$6,000**	**$133,000**

Proposal –

Infrastructure Audit for the Village of Cremona

RFP: AB-2025-04172

Submitted by:

Public Works Management Corporation

In association with 2695690 Alberta Ltd.

Date: July 9, 2025

Telephone: 403.519.8651
Email: michelle@pubworks.ca

July 9, 2025

Karen O'Connor, CAO
Barry Wiens, Public Works Foreman
Village of Cremona
Box 10, Cremona, AB T0M 0R0

Dear Ms. O'Connor and Mr. Wiens:

Public Works Management Corporation (PWMC) is pleased to submit this proposal in response to the Village of Cremona's Request for Proposals (RFP 2025-04172) for an Infrastructure Audit. Our team is committed to delivering a comprehensive assessment that supports the Village's viability review process by providing detailed insights into infrastructure conditions, risks, and future needs.

With extensive experience in infrastructure assessment, asset management, local government and utility system operations, PWMC and its partners are well-positioned to deliver a tailored solution. Our phased approach, grounded in industry-standard methodologies, ensures early decision-making and sustainable infrastructure management. We will evaluate operational models, including municipal-only operations, partnerships with the County or Mountainview Solid Waste Commission, and privatization, to optimize service delivery.

We look forward to collaborating with the Village of Cremona to achieve your infrastructure goals. Please contact me at (403) 519-8651 or michelle@pubworks.ca for clarifications or to discuss next steps.

Sincerely,
The PWMC Team, per:

Michelle Tetreault, BA, ENV SP

For:
Michael Wuetherick, P.Eng.
Albert Flootman, RPP, MCIP
Darwin Durnie, RET, ENV S, PWSIII

1.0 Introduction and Executive Summary

Public Works Management Corporation and its collaborating partners comprise a team of senior principals with decades of experience in local government administration, public works management, municipal infrastructure assessment, and asset management. Our team has successfully delivered projects for a range of clients, including implementation of asset management strategies that enhance operational efficiency and financial sustainability. We are excited to submit this proposal for the Infrastructure Audit for the Village of Cremona, as outlined in RFP 2025-04172.

Our approach is designed to provide the Village with a thorough understanding of its infrastructure's condition and capacity along with the identification of risk factors, enabling informed decision-making for future capital and operational planning. We will deliver a comprehensive audit that supports the municipal viability review process, balancing immediate needs with long-term sustainability.

Our Approach

We will employ a phased methodology aligned with best practices in asset management, as outlined in the *Building Community Resilience Through Asset Management* (Government of Alberta) handbook. The approach includes:

- Rapid Assessment: A preliminary evaluation to identify critical infrastructure needs and opportunities.
- Capital Requirements Analysis: In-depth assessment of capital needs across disciplines.
- Multi-Year Capital Plan: A 10-year plan to ensure sustainable infrastructure management.
- Operational Alternatives Assessment: Evaluation of municipal-only, partnership, and privatization models to optimize service delivery.

Why PWMC?

Our multidisciplinary team combines expertise in local government management, municipal operations, financial analysis, and stakeholder engagement, ensuring a holistic approach to infrastructure challenges and plans that are founded on thorough background information and detailed risk analyses, mindful of fiscal realities, and understandable by the public. We are committed to delivering a value-driven solution tailored to Cremona's unique needs, drawing on our experience with similar projects.

2.0 Project Understanding

The Village of Cremona seeks an infrastructure audit to support its viability review process, as directed by the Minister of Municipal Affairs for Alberta. The audit must provide detailed information on the current condition and capacity of the municipality's infrastructure and major assets, assess associated risks, analyze options for addressing infrastructure needs, and develop a prioritized action list with associated costs. Additionally, a ten-year capital plan and an operating plan are required to guide future infrastructure management.

Key Project Requirements:

- Assess the condition, capacity, and risks of infrastructure, including water distribution, groundwater supply, wastewater systems, roads, facilities, and public spaces, relying on a combination of reports provided by the Village, interviews with municipal staff, and field reviews.
- Determine benchmarks for similar-sized communities to compare accumulated depreciation, capital structure, etc.
- Analyze options for repair, rehabilitation, replacement, or other alternatives, considering capital, operating, or service level adjustments.
- Develop a prioritized action list with priorities (P1 high, P2 medium, P3 lower) based on risk assessments using consequence and likelihood scales (1-4).
- Create a ten-year capital plan addressing all high-priority (P1) actions within the first five years and significant medium (P2) and some lower (P3) priority actions over ten years.
- Develop an operating plan including recommended operational changes.

As specified by the RFP, the scope of work for this proposal excludes fleet assets, assets owned by other entities (e.g., County, regional services commissions), condition assessments recently completed and provided by the municipality, infrastructure needs arising from growth, and detailed design of options and recommendations.

Background Information:
The Village will provide resources such as the 2022 Regional Stormwater Management Plan, 2005 Infrastructure Study, 2001 Sim-Flo Study, and MRF mapping to inform the audit.

PWMC understands these requirements and is well-equipped to deliver a comprehensive audit that meets the Village's needs, drawing on the team's depth in asset management plan development, coupled with long term financial plans developed for municipalites of all sizes.

3.0 Project Management Approach

PWMC will adopt a collaborative and structured project management approach to ensure the successful delivery of the Infrastructure Audit. Key elements include:

- Project Team: A multidisciplinary team of infrastructure and asset management specialists, financial analysts, and stakeholder engagement experts, ensuring comprehensive coverage of all project aspects.
- Development of a project plan with timelines and tasks for each phase.
- Benchmark Meetings: Regular meetings with Village staff, including Karen O'Connor (CAO) and Barry Wiens (Public Works Foreman), to review progress, discuss findings, and provide direction. Agendas will be provided at least three working days in advance, and minutes will be circulated promptly.
- Methodology: Our approach is grounded in the principles of asset management from the *Building Community Resilience Through Asset Management* handbook, emphasizing service-centric decision-making, risk-based prioritization, and lifecycle cost analysis.
- Tools and Resources: We will leverage industry-standard tools from the *Getting Started Toolkit*, including asset inventory templates, risk assessment matrices, and capital planning templates, to ensure a systematic and efficient process.

Our project management approach is inspired by successful projects where phased implementation and stakeholder collaboration ensured timely and effective outcomes.

4.0 Methodology

Our methodology for the Infrastructure Audit is structured to deliver the required deliverables efficiently and effectively, enabling early decision-making and long-term sustainability. It is informed by the *Building Community Resilience Through Asset Management* handbook and the *Getting Started Toolkit*. The approach is divided into four phases:

4.1 Rapid Assessment of Infrastructure Deficit or Surplus

- Objective: Provide a high-level overview of infrastructure deficits or surpluses to inform early decisions.

- Activities:
  - Conduct a preliminary inventory and condition assessment of key infrastructure assets (e.g., water, wastewater, stormwater, roads, facilities) using the *Asset Inventory Template* from the toolkit.
  - Assess capacity and utilization to identify deficits or surpluses, referencing the *Level of Service Template*.
  - Apply the *Asset Risk Register Template* to identify critical risks, rating them based on consequence and likelihood (1-4 scale, per RFP).
  - Deliver a concise report summarizing findings and prioritized actions to support early decision-making.

- Tools: GIS mapping, asset management software, risk matrices.
- Outcome: A preliminary report delivered by August 31, 2025, enabling early prioritization of actions.

4.2 Sample Rapid Assessment

Appendix 1 to this proposal outlines the methodology for a rapid assessment, and what results in might yield.

4.3 Tailored Analysis of Capital Requirements

- Objective: Analyze capital needs by discipline to prioritize investments.
- Activities:

    - Break down capital needs by discipline (e.g., water, wastewater, roads), assessing maintenance, rehabilitation, and replacement costs using the Asset Replacement Forecast Summary Template.
    - Estimate lifecycle costs, incorporating methodologies from the toolkit's Costs and Funding guide.
    - Prioritize projects based on service impact, risk, and cost, aligning with community priorities through stakeholder workshops.
    - Provide pre-design cost estimates (Class D, ±20-30%).
- Tools: Cost estimation software, stakeholder workshops.
- Outcome: A detailed report with prioritized capital requirements, delivered by November 30, 2025.

4.4 Multi-Year Capital Needs Analysis

- Objective: Develop a 10-year capital plan to ensure sustainable infrastructure management.
- Activities:
    - Facilitate a half-day workshop with Village staff to align priorities, using the Capital Plan Template.
    - Create a 10-year capital plan, addressing all Priority 1 actions within the first five years and significant Priority 2 and some Priority 3 actions over the decade.
    - Identify funding strategies, including property taxes, user fees, reserves, grants (e.g., Alberta Community Partnership), and debt, drawing on Sylvan Lake's grant strategies.
- Tools: Financial modeling software, grant databases.
- Outcome: A comprehensive capital plan with annual cost breakdowns, delivered by January 31, 2026.

4.5 Operational Capacity and Alternatives Assessment

- Objective: Optimize service delivery through operational analysis.
- Activities:
    - Assess current operational capacity via staff interviews and data review, using the toolkit's Level of Service guide.
    - Evaluate three operational models:
        - Municipal-Only Operations: Assess feasibility and efficiency of maintaining current operations independently.

    - Partnerships with County or Mountainview Solid Waste Commission: Analyze shared services for cost savings and efficiency, inspired by Sylvan Lake's regional collaborations.
    - Privatization: Evaluate outsourcing options, considering service quality and cost, referencing industry trends.
- Provide recommendations based on cost, efficiency, service quality, and sustainability, using comparative cost analysis.
- Tools: Stakeholder workshops, comparative cost analysis.
- Outcome: A detailed operating plan and recommendations, delivered by February 28, 2026.

4.6 Stakeholder Engagement

- Conduct regular benchmark meetings, providing agendas three days in advance and circulating minutes promptly, as per RFP requirements.
- Facilitate a collaborative workshop to refine priorities, mirroring Sylvan Lake's stakeholder engagement for infrastructure projects.
- Data Utilization:
- Incorporate Village-provided data (e.g., 2022 Regional Stormwater Management Plan, 2005 Infrastructure Study, 2001 Sim-Flo Study, MRF mapping).
- Supplement with field inspections and toolkit resources to ensure accuracy.

5.0 Proponent Profile/Project Team Qualifications

Our project team comprises senior consultants with complementary expertise in municipal utility management, financial modeling, and stakeholder engagement, supported by technical and administrative staff. Key personnel include:

Michelle Tetreault, BA, ENV SP, Cert AM

- **Role: Project Administrator**
- Responsibilities: Oversee project coordination, ensure timeline and budget adherence, and facilitate stakeholder engagement.
- Experience: Over three decades in government relations, crisis communication, and municipal operations, with a focus on community engagement for utility projects, along with credentials in asset management. Member of the APWA National Asset Management Task force. CSA Committee for municipal resilience and flood mitigation. Executive Director of AB Common Ground Alliance – buried Infrastructure

Albert Flootman, BES, MPA, RPP, MCIP

- **Role: Planning and Coordination Lead**
- Responsibilities: Apply planning and local government expertise to operating and capital plans.
- Experience: Over 30 years in public sector roles, including land use planning, development projections, capital project management and governance, oversight of municipal functions including public works. Emergency Management leader and recovery specialist – rapid damage assessment to prioritizing recovery efforts.

Michael Wuetherick, P.Eng., NACLAA-Level 1, AM Cert (NAMS)

- **Role: Asset Manager**
- Specializes in complex contract negotiations, land use agreements, financial management and regulatory compliance for public-private partnerships, using a strategic approach that ensure that rates and investments align with project goals while mitigating potential legal and operations risks
- CAO of the South Red Deer Regional Wastewater Commission
- Negotiated multi-party agreements involving public and private sector stakeholders
- Drafted, reviewed, and enforced contracts for large infrastructure projects
- Integrated support information for asset management reviews for multiple hamlets – County of Vermilion River including natural gas system

Darwin Durnie, RET, ENV SP, PWLF

- **Role: Senior Consultant – Technical**
- Responsibilities: Provide technical oversight and ensure alignment with infrastructure needs.
- Experience: Over 40 years in Public Infrastructure in government and business including: strategic advisor, architecture, emergency management, water and wastewater systems, local government management, public works and utilities, and asset management.
- Lead asset management through CPWA Presidency, APWA, National Infrastructure Summit, RMA and AUMA Asset Management Course, Chairi of Certification for APWA, Elected Officials Training Program, Resiliency workshops.

Support Personnel:

Elizabeth Farthing, BComm, MSc, CCEP, CRM

Role: Finance/Modeling Lead

- Responsibilities: Lead financial analysis.
- Experience: Extensive experience in risk management, rate modeling and regulatory compliance in energy and utilities, including cost-recovery models for regional wastewater systems.

Mitchell Wright, BSc

- **Role: Civil Engineering Associate**
- Responsibilities: Provide technical analysis and project administration support.
- Experience: Skilled in database management and project delivery.

Resumes for all team members are provided in Appendix 32.

6.0 Pricing Structure and Fees for Services

Our fee structure reflects the complexity of the Infrastructure Audit, including data collection, assessment, risk assessment, analysis, and development of options and capital and operating plans. Pricing is provided on a project basis. All prices are in Canadian dollars, with GST identified separately.

Preliminary costs include:

TABLE 1: PRICING STRUCTURE - PRELIMINARY

Phase	Description	Fees
Project Initiation	Data collection, stakeholder meetings, summary report	$30,000
Risk Assessment/Analysis	Asset register, risk assessment	$60,000
10-year Capital Plan	Capital Plan development	$25,000
Operating Plan	Operating Plan development	$30,000
Reporting	Final report, Council presentation(s)	$15,000
Total Estimated Cost		$160,000
GST (5%)		$8,000
Total with GST		$168,000

Notes:

The core scope cost assumes efficient and timely data provision by the Village and no significant scope changes.

External Expenses (e.g., travel, printing) will be charged at cost plus 10% mark up.

Disbursements will include specialized GIS services, asset management software, and data analysis tools.

A disbursement recovery charge of 5% is added to all invoices.

For unanticipated tasks, we propose negotiating additional fees on a fixed or time and materials basis, using the hourly rates below.

TABLE 2: PROJECT PERSONNEL HOURLY RATES

Personnel	Role	Hourly Rate (CAD)
Michelle Tetreault	Project Administrator	$200
Michael Wuetherick	Asset Manager	$200
Albert Flootman	Planning and Coordination Lead	$200
Elizabeth Farthing	Finance/Modeling Lead	$200
Darwin Durnie	Senior Consultant/Technical	$225
Mitchell Wright EIT	Civil Engineering Associate	$125
GIS Specialist	GIS, DATA management	$165
Administrative Support		$95
Junior Assistant/Intern		$85

We will explore grant opportunities, such as the Alberta Community Partnership, to offset costs, drawing on previous experience with grant-funded projects. We offer a fixed-fee or hourly rate structure based on the Village's preference, ensuring cost-effectiveness.

7.0 Proponent/Project Team References

We provide three references from clients who have contracted us for infrastructure related work.

1. Ermineskin Cree Nation

Contact: Director of Infrastructure, Ermineskin Cree Nation

Phone: 780.585.3741

Project: Waterline extension project management (2023–2024)

Description: Management of a $39M waterline extension, including rate analysis and grant applications.

2. North Red Deer River Water Services Commission

Contact: Jordan Thompson CAO

Phone: 403.782.1268

Project: System Expansion

Description: Developed a comprehensive project plan and strategy to deliver a 28 km pipeline extension and comprehensive system upgrade

3. Sylvan Lake Regional Water Wastewater Commission

Contact: Michael Minchin, CAO

Phone: 403.343.6399

Project: Wastewater rate review and business plan update (2025)

Description: Conducted comprehensive rate review, capital planning for expansion

8.0 Appendices

Appendix 1 – Rapid Assessment Methodology and Sample Results

The following (*in italics*) is an example of what a rapid condition assessment might yield.

Rapid Infrastructure Condition, Capacity, and Risk Assessment

***Methodology**:*

- *Utilized provided data (e.g., 2005 Infrastructure Study, 2022 Regional Stormwater Management Plan, Sim-Flo Study, MRF mapping).*
- *Conducted field inspections and interviews with Village staff to validate data.*
- *Applied risk assessment framework (consequence and likelihood scales of 1-4, as per RFP).*

***Findings by Asset Category**:*

- ***Water System**:*
  - ***Condition**: The system includes three groundwater wells (#1, #12, #14), a 614 m^3 treated water reservoir, a 73 m^3 clear well, and distribution piping. Components range from 1962 to recent installations. Recent upgrades (2024) include new valves, pumps, and motors. Physical condition is fair to good, but aging pipes (e.g., 1962 installations) show corrosion.*
  - ***Capacity**: Current storage (687 m^3) is sufficient for a population of 550, assuming the reservoir remains at least 81% full. High-demand periods reduce storage below this threshold, limiting capacity for growth or fire protection.*
  - ***Risks**:*
    - ***Undesirable Event**: Pipe breaks due to corrosion.*
      - *Consequence: 3 (high impact—interruption of essential services, potential health risks).*
      - *Likelihood: 3 (likely—frequent history of minor leaks).*
      - *Risk Score: 9 (Priority 2).*
    - ***Undesirable Event**: Insufficient storage during peak demand.*
      - *Consequence: 4 (intolerable—extended service interruption, fire protection risks).*

        - *Likelihood: 2 (possible—occasional occurrences).*
        - *Risk Score: 8 (Priority 2).*
- ***Wastewater System**:*
    - ***Condition**: The collection system includes VCT pipes (pre-2005) and newer PVC pipes. The two-cell lagoon (1962, upgraded 1982) is functional but nearing capacity. VCT pipes exhibit cracking and root infiltration.*
    - ***Capacity**: Supports up to 700 residents with irrigation expansion; growth to 824 requires lagoon expansion.*
    - ***Risks**:*
        - ***Undesirable Event**: VCT pipe failure.*
            - *Consequence: 3 (high impact—service interruption, environmental damage).*
            - *Likelihood: 3 (likely—frequent maintenance required).*
            - *Risk Score: 9 (Priority 2).*
        - ***Undesirable Event**: Lagoon overflow during heavy rain.*
            - *Consequence: 4 (intolerable—environmental damage, regulatory fines).*
            - *Likelihood: 1 (improbable—rare occurrences).*
            - *Risk Score: 4 (Priority 3).*
- ***Stormwater System**:*
    - ***Condition**: Eight storm mains in lower blocks are in good condition, with no recent issues reported.*
    - ***Capacity**: Adequate for typical conditions but may be strained during extreme weather.*
    - ***Risks**:*
        - ***Undesirable Event**: Flooding due to insufficient capacity.*
            - *Consequence: 2 (moderate—temporary service interruption).*
            - *Likelihood: 2 (possible—occasional pooling).*
            - *Risk Score: 4 (Priority 3).*
- ***Transportation**:*
    - ***Condition**: Roads are in fair condition, with recent paving (2020) and sidewalk upgrades (2022-2024). Some segments show wear from freeze-thaw cycles.*
    - ***Capacity**: Meets current traffic demands.*
    - ***Risks**:*
        - ***Undesirable Event**: Road surface failure (potholes).*
            - *Consequence: 2 (moderate—reduced comfort, minor repair costs).*
            - *Likelihood: 3 (likely—frequent spring issues).*
            - *Risk Score: 6 (Priority 2).*
- ***Facilities and Public Spaces**:*

- ***Condition**: Buildings (e.g., water treatment plant, council chambers) and parks are well-maintained. Cemeteries require minor upkeep.*
- ***Capacity**: Sufficient for current needs.*
- ***Risks**:*
  - ***Undesirable Event**: Building system failure (e.g., HVAC).*
    - *Consequence: 2 (moderate—temporary service disruption).*
    - *Likelihood: 1 (improbable—regular maintenance).*
    - *Risk Score: 2 (Priority 3).*

Appendix 2 – List of Representative Projects

Our team has managed over $4 billion in capital projects, including:

- Central Alberta Wastewater System: Conceptual design for a 200 km regional wastewater system.
- Sylvan Lake Regional Water/Wastewater Services Commission: Business Plan update, including rate modeling and infrastructure planning.
- North Red Deer River Water Services Commission: Pipeline extension project including financial analyses and rate review.
- Shirley McLellan Regional Water Services: 142 km waterline development.

Appendix 3 – Resumes

- Michelle Tetreault, BA, ENV SP, AM Cert, Public Works Management Corporation
- Michael Wuetherick, P.Eng., Racin Management Consulting Inc.
- Darwin Durnie, RET, ENV SP, PWLF, darwindurnie consulting corporation
- Albert Flootman, BES, MPA, RPP, MCIP, Localis Corp.
- Elizabeth Farthing, BComm, MSc, CCEP, CRM, UTW Management
- Mitchell Wright, BSc

Michelle Tetreault, BA, ENV SP, AM Cert

MICHELLE TETREAULT, BA, ENV SP, AM Cert

mmtetreault@gmail.com C: 403.519.8651 5220-50A Ave Sylvan Lake, AB T4S 1E5

EXECUTIVE PROFILE

- Strategic communications and public affairs executive with over twenty-five years of leadership and consulting experience on government operations, strategic communications, issues management, advocacy, business planning, business continuity, emergency management and protocol
- High-level advisor on multiple policy issues from climate adaptation to emergency preparedness for municipalities, as well as multiple provincial and federal policy issues and proposals
- Problem-solver and solutions driver with a proven track record in strategically managing high-profile and complex issues and liaising with a multitude of high-level stakeholders, including those at all levels of government, the public and non-profit sectors

HIGHLIGHTS

Leadership	Project management	Lobbying & advocacy
Public Affairs	Stakeholder outreach	Public campaigns
Government relations	Community relations	Business planning
Communications	Municipal operations	Issues management

PROFESSIONAL EXPERIENCE

2024 Strategic Advisor – Minister of Environment and Protected Areas Nature Summit
Providing strategic advice to department staff on development and implementation of Alberta's first nature summit that will engage over 100 stakeholders interested in contributing to Alberta's Nature Strategy.

2024 Workshop Facilitator - Balancing the Needs and Wants during Response and Recovery Workshop
Development and delivery of workshop for public works professionals that focuses on how to use existing public works practices in emergency management, asset management, disaster financial assistance, risk assessment and cyber security.

2023 Manager VIP and Protocol – World Petroleum Congress
Implemented program development initiatives for a diverse array of stakeholders, including the Premier's Office, 4 provincial Ministers, Saskatchewan and Newfoundland Provincial Energy Departments, and three

Federal Ministries, for their involvement in a prominent international congress hosting over 15,000 delegates from 110 countries. Led government relations activities with over 50 embassies and Canadian Foreign offices.

2022 – Current Strategic Advisor - ALUS

Registered lobbyist providing strategic advice to a nature-based solution organization that works collaboratively with farmers, producers and municipalities in developing sustainable and resilient communities. Develop advocacy strategies for Environment and Protected Areas, Indigenous Relations, Forestry and Parks, Agriculture and Irrigation and Finance Ministers and Departmental staff.

2022 Manager Venues and Logistics – His Holiness Pope Francis Walking Together Tour

Project Manager for venue preparations at Maskwacis and Lac Ste. Anne venues. First Nations consultation with band administration on issues such as infrastructure improvements, telecommunications, protocol, procurement and emergency management leading to the visit of His Holiness Pope Francis.

2019– 2021 Senior Consultant for the Town of Drumheller

Secured over $50 Million in funding from the provincial and federal governments for the Town of Drumheller's Flood Mitigation and Climate Adaptation System, a multi-hazard solution covering 100 kms of riverbank to reduce community flooding in the long-term. This required the careful development of a complex government relations strategy and outreach plan for provincial and federal elected and non-elected officials to not only secure the largest infrastructure grant funding ever for the community, but to ensure its implementation at the community level. This required a monthly, multi-year communications and social media strategy, extensive community consultations, first nations consultation and an issues management plan to manage land use by-laws that would impact residential homes in the flooding areas.

2018 Senior Consultant for the Government of Alberta – Flood Readiness Grant Strategy and Implementation

Led the policy development and execution of $10M in funding to assist 32 Alberta communities in flood preparedness and response efforts during states of local emergency for the Alberta Emergency Management Agency during the 2018 Spring flooding in Alberta, per the Minister's emergency grant announcement.

2015 – 2020 Executive Director – Alberta Common Ground Alliance

Executive Director for the provincial damage prevention association. As a registered lobbyist in Alberta developed government relations strategies for board members, advocated for provincial legislation, prepared Ministerial and MLA briefings, strategic itineraries for legislation days, member statements presented to the Legislative Assembly, and media strategies to promote awareness of damage prevention. Also led Provincial advocacy campaigns that resulted in the introduction of Bill 211 *Alberta Underground Infrastructure Notification System Act.*

2016 Board of Directors – Canadian Common Ground Alliance

Executive Director for the Alberta Chapter that promotes worker safety and environmental protection with respect to underground utilities. Led a national public advocacy campaign that resulted in the development of Bill S-229, *An Act respecting underground infrastructure safety.*

2015 Stakeholder Relations Consultant – Lethbridge County

Led stakeholder relations, communications and lobbying for the largest intensive livestock community in Canada to implement a new taxation by-law which was passed within 60-days.

2012-2014 Director of Stakeholder Relations – Government of Alberta (International and Intergovernmental Relations)

Organized and developed event planning, communications, media strategies and protocol for various international trade missions for Alberta's Premier, Ministers, and delegations including pre-planning, advance visits, and protocol requirements for Premier visits. Missions included the Council of Federation, provincial trade meetings in India and China, the World Economic Forum, USA, Japan, and the London Olympics. Also led the successful development and implementation of an international trade forum *Stampede Investment Forum*, whereby international investors were paired with Alberta businesses to increase international trade opportunities.

2010 Manager Program and Scenarios – G8 and G20 World Leaders Summits

Produced the World Leaders Program and Scenarios from their arrival to Canada to their departure. This top secret position liaised directly with the Prime Minister's Office, World Leaders Security Details, the Department National Defense, and Country Sherpas. The Program was executed 11 minutes ahead of schedule – a first for a G20 World Leaders Summit.

2007 – 2010 Leader Crisis Communications - The City of Calgary

Developed a City of Calgary crisis communication plan, including detailed protocols and policies as well as training over 100 municipal staff on executing the plan and response efforts. Participated in over 25 EOC Activations and 50 exercises. Responsible for developing City messaging during an EOC activation, briefing senior staff and elected officials. Managed City media relations during activations.

2003- 2007 Leader Media Relations – The City of Calgary

Responsible for developing media relations strategies for the largest municipality in Alberta. Frequent engagement with local, provincial, and national media. The division produced a weekly radio talk show program highlighting key decisions made by council and also highlighted successes on monthly TV advertorials. Media campaigns developed for key policy implementations.

2002 G8 Summit Municipal Liaison – The City of Calgary

Prepared municipal strategic communications and media relations plans for first world leaders summit post 911 and Canada's largest ever security event. Developed policies, protocols and messaging for staff involved with summit preparations and trained over 100 potential designated spokespeople. Collaborated with various stakeholder groups including surrounding municipalities, Business Owners and Managers Association, Chamber of Commerce, Community Associations and media on security preparedness and roles and responsibilities during the Summit.

1998- 2002 Assessment Public Relations and Communications – City of Calgary

Managed market value campaign that included media relations, public consultation, print, employee engagement, communications, internal/external, tradeshow strategies. Developed first website in Canada whereby citizens could publicly review all assessments. Awarded International Association of Assessing Officers Best Public Information Campaign. Corporate business plan development communications lead that provided strategic advice for internal and external communication strategies. Developed and participated in council budget deliberations.

1993 – 1998 Manager Economic Development - City of Waterloo

Instrumental in promoting municipal facilities as a premier tournament destination for a variety of competitions including Scott Tournament of Hearts, National Precision Skating Championships, National Baseball Championships, International Short Track Speed Skating Championships. Led strategic business planning and policy development for recreation department and championed internal continuous improvement plan that lead to 10% pay bonus for municipal staff if year-end operations came under budget.

EDUCATION

Bachelor of Arts Recreation and Tourism/Marketing - *University of Waterloo, 1989*

Emergency Public Information Officer - *Emergency Preparedness College, 1997*

Strategic Management Diploma - *University of Calgary, 2000-2002*

Advanced Media Training - *Jim Stanton and Associates, 2002*

SMART Project Management -*University of Calgary, 2004*

Planning for Effective Public Participation - *International Association of Public Participation, 2008*

Incident Command System (100/200/300) - *Emergency Response Institute Canada Inc, 2009*

Asset Management Certification - *Institute Public Works Engineering Australasia, 2015*

Public Infrastructure Engineering Vulnerability Committee (PIEVC) Certificate - *Engineers Canada 2019*

Envision Sustainability Professional - *Institute Sustainable Infrastructure 2021*

Indigenous Canada Certification Course – *University of Alberta 2021*

Nature Based Solution Certificate - *Partnership for Environment Disaster Risk Reduction, 2021*

COMMITTEES AND MEMBERSHIP

Canadian Standards Association – Technical Committee
2021-2022 Managing Flooding and Erosion at the Watershed Scale Using Nature-based Solutions (NbS): Guidance for Governments
American Public Works Association
2016- 2018 Asset Management Task Force
2016 – 2022 Emergency Management Committee
2022 – 2024 Chair – Emergency Management Technical Committee
American Public Works Association – Alberta Chapter
2018 -2022 Emergency Management Committee Chair
AEMA - Provincial Operations Center Representative

Michael J.J. Wuetherick, P.Eng.

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Sylvan Lake Alberta T4Y 1S4
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Profile

Experienced and successful Senior Executive with strong technical, analytical and communications skills developed over a successful 35-year career. Proven track record with over 25 years of executive management experience in both private industry and 6 years public service experience as Chief Administrative Officer for two regional public utility Regional Service Commissions.

Effective leader, results driven individual utilizing a balance of strong technical skills, strategic planning, business acumen, strong negotiation skills and demonstrated entrepreneurial aptitude. Experienced working with teams including staff development, implementing management controls, ensuring professional conduct and sound governance practices are followed.

Resourceful, experienced, and respected leader with extensive networks with professionals in the technical, financial services and legal advisory functions.

Skills and Personal Characteristics

- Demonstrated organization and planning skills
- Strong communication skills
- Experienced public speaker and presenter
- Effective analytical and problem-solving capability
- Highly Developed negotiation skills
- Strategic thinker, with proven leadership ability
- Performance driven, and goal orientated
- Proven governance and organizational skills as a Corporate Director in public and private organizations
- Senior municipal government experience, with knowledge of Alberta MGA and public service administration
- Proven ability to manage complex public works, strategic planning, asset management, and staff development

Business Development:

- Founding shareholder of three start-up companies, managing their strategic growth from start-up to eventual sale for cumulative value of over $300 million.
- Strong negotiation skills and an ability to ability to manage business risks, optimize operations while maintaining best practices and compliance with OH&S regulations.

Financial Acumen:

- Experienced business manager with demonstrated commitment to strong

financial controls, asset management and mitigating risks.
- Solid financial analysis background including experience as CFO and intimate knowledge of financial reporting and audit processes for both private and public entities.
- Extensive governance experience with an exceptional network of financial and legal expertise applicable to aid in executing strategic initiatives.

Management Skills:
- 25+ years of senior project management experience including major construction projects totalling over $2 Billion and capital programs of over $300 mm per year.
- Performed investor relations function including extensive presentation experience to shareholders and capital market professionals, and both provincial and municipal elected officials.
- Significant experience in corporate board and municipal Service Commission governance requirements

Professional Career Experience

President & CEO, Racin Management Consulting Inc.
April 2018 – Present

Founder, and primary management consultant providing management, administrative and financial services to municipalities and regional service Commissions in Central Alberta. Racin Management Consulting Ltd. encompasses a pool of talented and experienced consultants in financial services, operations oversight, asset management planning, administrative services, and risk management initiatives.

Chief Administrative Officer, South Red Deer Reginal Wastewater Commission
July 2018 – Present

Chief Administrative Officer for the South Red Deer Regional Wastewater Commission, a municipal entity serving a population of over 35,000 people in six Central Alberta municipalities with over $150 mm of assets and a $7.5 mm annual budget. Duties include responsibility over administrative compliance with the Municipal Government Act, oversight of operations, financial services and long-term strategic planning and risk management.

As CAO, developed a long-term Asset Management Planning, Preventative Maintenance Management System, and a thorough Safety Program for the Commission. Responsible for overseeing daily performance of a team of 3 direct reports plus an additional 24 system operators.

Chief Administrative Officer, Mountain View Regional Waste Management Commission
September 2018 – Present

Chief Administrative Officer for the Mountain View Regional Waste Management Commission, a municipal entity serving a population of over 34,000 people in six Central Alberta municipalities with over $7 mm of assets and a $3.2 mm annual budget. Duties include responsibility over administrative compliance with the Municipal Government Act, oversite of operations, financial services and long-term strategic planning and risk management.

As CAO, developed a long-range strategic plan, and an amended operations plan including optimization of overall operations to reduce operating costs while improving efficiency. Introduced updated technology to operations resulting in a $30 mm increase in net present value of the landfill while extending its service life by over 17 years. Significantly reduced the Commission's business risks through negotiation of recycle processing and hauling contracts. Responsible for overseeing daily performance of 3 direct reports and a total staff of 14.

Technical Advisor, Summer Villages of Sylvan Lake
September 2017 – Present

Technical advisor providing engineering, administration, and financial planning services to five rural summer villages Technical advisor providing engineering, administration, and financial planning services to five rural summer villages related to wastewater collection and transmission. Provided project management services for a $4.3 mm municipal wastewater collection system (SV of Sunbreaker Cove) in 2021. Technical advisor and member of Sylvan Lake Regional Wastewater Commission technical committee since 2017. Committee's responsibility includes asset management planning, operations oversight, financial administration including rate models and policy development. related to wastewater collection and transmission. Provided project management services for a $4.3 mm municipal wastewater collection system (SV of Sunbreaker Cove) in 2021.

Technical Advisor, Summer Villages of Sylvan Lake
September 2017 – Present

Technical Advisor providing engineering, administration, and financial planning services to five rural summer villages related to wastewater collection and transmission. Provided project management services for a $4.3 mm municipal wastewater collection system (SV of Sunbreaker Cove) in 2021. Technical advisor and member of Sylvan Lake Regional Wastewater Commission technical committee since 2017. Committee's responsibility includes asset management planning, operations oversight, financial administration including rate models and policy development. related to wastewater collection and transmission. Provided project management services for a $4.3 mm municipal wastewater collection system (SV of Sunbreaker Cove) in 2021.

Energy Sector Focused Experience

Managing Director, Racin Capital
April 2012 – May 2018

Managing Director and portfolio management of personal investment capital. Actively managed investment strategy focusing on Canadian and USA investments. In addition, Racin Capital provides start-up and re-capitalization financing and strategic business planning services regarding new start-up organizations. Racin Capital has evaluating new business initiatives focused in energy infrastructure plays, energy services, and start-up energy exploration and production Companies.

President and Chief Executive Officer, Director ***Seaview Energy Inc. (TSX-V CVU.a)***
October 2006 – March 2012

Founding shareholder and CEO of Seaview Energy Inc., responsible for leading the Company's growth from startup through to exit with over $80 million of total enterprise value. Responsible for overseeing strategic direction and implementing corporate operations in support of corporate goals. Including accountability to directors and shareholders to ensure corporate governance and compliance with all regulatory bodies.
Led a multi-disciplinary team including engineers, geologists, accountants, and support staff in execution of corporate operations. Closely monitored corporate performance towards achieving both operations and financial performance goals, including benchmarking to competitor performance. Experience investor relations professional, including extensive public presentations and management of public information including regulatory filings.

VP – Business Development, and COO & CFO ***Signal Energy Inc. (TSX-V SGI)***
April 2003 – April 2006

Chief Operating Officer of a public traded energy company with operations focused in Alberta. Managed growth of the company from a re-capitalized tax-loss vehicle to over $120 million of total enterprise value at exit.

Directed business development including merger and acquisition evaluation, oversee efficient execution of corporate operations, and managing capital and operating budgets. Lead negotiator of $100 million major asset sale in Q1- 2006 resulting in $30 million cash distribution to shareholders.

President and Chief Executive Officer, Director ***Capture Energy Corp. (Private)***
April 2000 – April 2003

Founding shareholder and CEO of Capture Energy Corp., from start-up through to exit with over $35 million of total enterprise value.

Team Leader, Business Development Manager ***Rio Alto Exploration. (TSX-RAX)***
March 1997 – April 2000

Accountable for execution of team operations consisting of including over 25,000 boe/d of production and annual capital budgets exceeding $200 million. Lead evaluations engineer responsible for identifying strategic acquisition opportunities and completing thorough technical and financial evaluation. Successfully executed over $1.8 billion of mergers and acquisitions over 3 years.

Process/Facilities Engineering Positions ***Norcen Energy, Suncor***
September 1990 - March 1997

In the early stages of my career, my primary focus was on field operations including design, construction and operations of oil and natural gas processing facilities. My primary role was focused on project management during construction phase through to start-up and operations management. My extensive experience in the field provided me with a solid background of the operations component of the energy business.

Education

Advanced Certificate in Local Authority Administration (NACLAA Level 1, (2021-2022)
University of Alberta, Faculty of Extension.

Professional Certificate in Asset Management Planning, (2018)
NAMS Canada (through affiliation with Federation of Canadian Municipalities)

B.Sc. Chemical Engineering (1990)
University of Alberta (Edmonton, Alberta)

Tech. Diploma (Honours) (1987) in Chemical Engineering Technology
Southern Alberta Institute of Technology (Calgary, Alberta)

Affiliations

Professional Engineer (non-practicing status) in the province of Alberta, member in good standing of APEGA since 1990.

Commodore, Sylvan Lake Sailing Club, a club of Central Alberta keel boat racers hosting competitive sail racing on Sylvan Lake, Alberta

Darwin Durnie, RET, ENV SP, PWLF

Darwin Durnie
Infrastructure Expert | Project Manager | Regional Collaboration Specialist
Email: dkurnie@gmail.com | Phone: 403-875-1456
Twitter: @dkdurnie

Executive Summary

Darwin Durnie is a highly skilled infrastructure professional with over 40 years of experience managing large-scale public infrastructure projects. His expertise lies in the delivery of complex water and wastewater systems, ensuring projects are completed on time and within budget. Darwin is also known for his innovative problem-solving approach and for developing regional solutions by fostering strong partnerships across municipalities. His leadership extends into disaster recovery, emergency response, and public infrastructure management, where he has been instrumental in coordinating multi-stakeholder collaborations.

Key strengths include managing critical infrastructure, ensuring regulatory compliance, and leading multi-million-dollar capital projects. Darwin has played a crucial role in Alberta's public works and is recognized for his leadership in infrastructure safety and sustainability.

Core Competencies

- Infrastructure Project Management
- Emergency Response & Disaster Recovery
- Regional Collaboration & Stakeholder Engagement
- Risk Mitigation & Safety Leadership
- Strategic Planning & Budgeting
- Water and Wastewater Systems
- Regulatory Compliance & Governance
- Capital Project Execution

Related Experience

Regional Water & Wastewater Systems

- **Kneehill Regional Waterline**
  Managed the regulatory approvals and the development of a 95 km regional water transmission line serving seven municipalities. This $32M project included high-pressure waterlines and an expansive water reservoir to improve regional access to clean water.
- **Drumheller Water Treatment Plant & Transmission System**
  Project Manager responsible for managing emergency operations to improve water quality for regional customers. Oversaw a flushing program and an assessment of over 300 km of water mains, leading to the lifting of a boil water order.
- **Mountain View Regional Water Services Commission (MVRWSC) Transmission Upgrades**
  Led a $34M project to upgrade the water transmission system, significantly enhancing service capacity in Central Alberta.
- **Shirley McLellan Regional Water Services Commission (SMRWSC) Waterline**
  Directed the development of a 142 km waterline servicing Stettler and Paintearth Counties, ensuring improved regional water access.
- **Sylvan Lake Regional Partnership Initiative**
  Developed conceptual designs for a water and wastewater transmission system to service the Sylvan Lake region. This project was key in supporting regional growth and sustainable water management.
- **Highway 12/21 Regional Water Services Commission Waterline**
  Senior Advisor overseeing the design and development of a 23 km regional water system extending from Bashaw to Ferintosh, providing vital water infrastructure for rural communities.
- **Rosedale to Cambria/East Coulee Water Supply Project**
  Project Manager responsible for the extension of water mains to provide reliable water supply to 258 family residences in rural areas.
- **East Central Alberta Regional Water Services Commission Water Supply**
  Conducted a needs analysis and design report for potable water supply servicing rural communities in East Central Alberta.
- **Mountainview Regional Water Services Commission Line Twinning**
  Project Manager for preliminary design of transmission upgrades to the MVRWSC waterline

- **Central Alberta Regional Wastewater South Leg Preliminary Design**
  Project Manager for preliminary design of 87 km regional wastewater transmission system, including multiple high pressure lift stations

- **Drumheller Wastewater Treatment Plan Upgrades**
  Project Manager for design and services during construction

- **Central Alberta Regional Wastewater System**
  Developed the conceptual design for a 200 km regional wastewater collection and treatment system, supporting population growth from 150,000 to 350,000 people while aligning with Alberta's "Water for Life" sustainability strategy.

Disaster & Emergency Management

- **2016 Horse River Fire**

  Senior Advisor to the Government of Alberta, providing strategic infrastructure recovery advice following the devastating wildfire.

  2013 Alberta Floods – Town of Drumheller
  Led the operational response by constructing 8 km of temporary berms with 90,000 cubic meters of fill in 54 hours, protecting the town from severe flooding.

- **2011 Slave Lake Fire**
  Infrastructure advisor, providing critical support in data recovery and coordinating the emergency response.

- **G8 Summit (2002) & G20 Summit (2010)**
  Managed infrastructure and logistical operations as Associate Director of Facilities, ensuring seamless execution of global events.

Public Works & Government Collaboration

- **Past President, Alberta Public Works Association & Canadian Public Works Association**
  Twice elected as President, leading advocacy for infrastructure development, safety initiatives, and disaster preparedness in the public works sector.

- **Alberta Utility Coordination Committee (AUCC)**
  Founding member, focused on improving utility safety and damage prevention through coordination and collaboration with multiple municipalities and stakeholders.

Awards & Recognition

- **Queen Elizabeth II Platinum Jubilee Medal – Excellence in Emergency Management and Infrastructure**
- **APWA Top Ten Public Works Leader Award (2015)**
- **APWA President's Award (2015)** – Honoured for leadership in public works in North America.
- **Queen Elizabeth II Diamond Jubilee Medal (2012)** – Recognized for significant contributions to community volunteerism.
- **Public Works Leadership Fellow (2011)** – Donald C. Stone Institute, American Public Works Association.
- **Emerald Awards Finalist (1997)** – For leading the Municipal Energy Management Program.

Education

- **Civil Engineering Technology Diploma** – Southern Alberta Institute of Technology (1984)
- **Emergency Public Information Officer** – Emergency Preparedness College, Ottawa (1997)
- **Traffic Engineering Certificate** – University of Alberta (1989)
- **Emergency Operations Centre Management** – Emergency Preparedness College, Ottawa (1987)
- **Infrastructure Asset Management** – NAMS Canada, Engineers Canada PIEVC

Albert Flootman, BES, MPA, RPP, MCIP

Albert Flootman, BES, MPA, RPP, MCIP

Principal, Localis Corp.

Email: albert.flootman@localisplanning.com *Telephone: 403.710.8996*

Seasoned Public Administrator and Planner with extensive local government expertise leading strategic functions in local government organizations.

Highly collaborative team leader inspiring superior performance by developing, mentoring and appreciating employees. Articulate communicator and negotiator with a career-long record of working effectively through committees and presenting recommendations at the Council level.

Skilled researcher and consultant, advising governments and non-profit and private sector organizations.

Areas of expertise:

Governance	Strategic Planning & Leadership
Negotiations and Agreements	Community Planning
Capital Project Management	Operations Management
Financial Oversight & Control	Downtown Revitalization
Intergovernmental Relations	Liaison with Community Stakeholders
Emergency Management	Collaborative Team Leader
Recruitment	Public Speaking

Career Chronology

Principal, Localis Corp. (Planning & Local Government Services) – 2020 to present
Serving a range of public, non-profit, and private sector clients in matters relating to governance, policy review and development, applied research, land use planning and development, project management, interim management services

- Senior Advisor to Drumheller Resiliency and Flood Mitigation project – 2020-2021
- Interim Director, Parkland Community Planning Services – 2022-2023
    - Led a municipally owned planning agency during the search for a new director (chief executive)
    - Supported the Board during the executive search
    - Consulted with members and developed a new funding model for Board approval
    - Led specific projects, liaised with municipal CAOs and development officers

Chief Administrative Officer, Town of Ponoka – 2016-2020
Leadership of a high-performing strategic team
Key achievements:

- planning and construction of a new civic centre
- leadership development
- strengthening relationships with community stakeholders, especially the Ponoka Stampede

Manager, Recovery South, Alberta Emergency Management Agency (Disaster Recovery Program) – 2015-2016

- Led a team of case managers serving Calgary and High River residents affected by 2013 flood losses

Director Engineering, Planning & Operational Services, Town of High River – 2013-2014

- Leadership of a wide range of municipal services, including public works, parks planning and economic development

Director of Emergency Management, Town of High River – 2013-2014

- Appointed post-flood during latter stages of response; deeply involved in the first stages of community recovery
- Oversaw creation of new Emergency Management Plan, measures to support staff in future emergencies, and supported business continuity planning

Director of Community & Legislative Services, Lethbridge County – 2010-2013

- Leadership of planning, and fire and emergency services

Director of Development Services/Interim Director of Engineering & Public Works, Town of Creston (2007-2009)

- Responsible for planning and development, engineering and operations, development of equipment replacement program, airport management, including negotiation of transfer to non-profit society

Education

Master of Public Administration, University of Western Ontario – 1997

Bachelor of Environmental Studies (Honours Urban & Regional Planning), *University of Waterloo* – 1990

Other Achievements and Affiliations

Full member, Canadian Institute of Planners – since 1995

Registered Professional Planner (RPP), Alberta – since 2010
Incident Command System (ICS) – qualified to ICS 300
Public Information Officer (PIO) training
Member, Alberta Urban Municipalities Association Governance Committee – 2019-2020
Ponoka Housing & Homelessness Committee – Founding Member
Founding Vice-President, Creston Valley Community Housing Society
President, University of Western Ontario Local Government Program Alumni Society – 2004-2006
CAMA member 2016-2023
Associate Member, Canadian Association of Management Consultants

Elizabeth Farthing, BComm, MSc, CCEP, CRM
250-290-0228 Elizfarthing@gmail.com

As a senior leader in energy development, operations and marketing organizations, I have held responsibility for corporate regulatory and policy compliance programs to ensure adherence to all regulations, rules, policies and applicable laws. I collaborated with global shared service and project teams for proactive risk assessment, policy development, process integration and improvement, ensuring strong, standardized and auditable controls to mitigate risk, reduce cost and improve efficiency as well as foster an organizational culture of compliance and ethical conduct.

PROFESSIONAL EXPERIENCE

Head of Compliance North America Region
• Conduct risk assessments, develop policy and programs for compliance with all applicable regulation, sanctions and corporate policies across all commodities traded, ensuring the highest standards in policy and programs
• Conduct impact assessments and integrate new commodities desks into existing organizational structure, developing policy, procedures and training ensuring controls and risk mitigation from the outset of trading activity
• Build requirements and implement and integrate sophisticated trade surveillance programs and processes for exchange, OTC, ISO and algorithmic trading activity

Managing Partner
• Commercial and residential property management
• Business consulting, regulatory affairs, ethics and compliance advisory

Director, Corporate Compliance
• Understand and interpret complex regulatory documentation, conduct impact assessments and interface with regulators to build effective regulatory compliance programs as well as achieve optimal audit outcomes
• Led Privacy Office and Information Governance program
• Ensure compliance with all regulation, environmental standards and internal policy requirements either directly or through oversight of business function management
• Conduct and maintain compliance risk assessments
• Manage internal and external investigations, pre and post mitigation risk assessments and event reporting
• Responsible for centralized compliance functions under the Code of Conduct & Business Ethics, Anti-Bribery and Anti-Corruption policies as well as Privacy, Information Management, Lobbying Compliance, CER, FERC, NERC, FCPA, DOE, and other regulation, contract and covenant obligations

Director Energy Marketing Compliance & Operational Risk
• Accountable for the Compliance, Operational Risk as well as Data & Information Governance programs
• Manage teams to ensure compliance with all regulation governing international energy trading (power, natural gas and related products, lobbying and recordkeeping
• Mitigate risk of people, process and technology in operations
• Demonstrate strong revenue side controls and reporting
• Integrate regulatory and compliance processes for acquisitions

Senior Advisor, Compliance and Ethics
• Oversee energy market rule compliance and investigate all potential contraventions of US and Canadian regulation for power, natural gas and related products
• Manage regulatory and compliance processes in business integrations and divestitures
• Conduct risk assessments and prioritize mitigation efforts
• Manage self reports as well as information/clarification requests from regulatory bodies
• Develop and oversee the regulatory reporting program for US and Canada merchant and contracted trading
• Develop the compliance program to mitigate risk and foster a strong, visible compliance culture
• Design a full records management program, author the information governance policy as well as oversee project planning, implementation, change management and procedural documentation
• Oversee regulatory compliance in all FERC and NERC jurisdictional regions
• Develop program for compliance with Dodd-Frank and Canadian Derivative legislation
• Lead continuous process improvement where opportunities present

Project Manager, Regulatory Compliance Program
• Led the Federal Energy Regulatory Commission (FERC – US) audit response initiative, developing the regulatory reporting and compliance program involving CFTC (Dodd-Frank), DOE, EIA, NEB, and other US and Canadian regulatory agencies. Advise policy and develop procedures and training for compliance and audit/oversight functions
• Responsible for compliance requirements in front office energy trading procedures, and in the implementation of a new energy trade management system

Sr. Manager, Business Transformation, Sr. Manager Operations,
• Change management, process improvement, information governance, management consulting
• Manage Information Management operations for Western Canada and Yukon and Northwest Territories

• National Operations support in compliance and privacy initiatives, system implementation projects, process improvement and relocation projects

BOARD MEMBERSHIP
Member, Board of Governors College of the Rockies. Appointment July 2024 – July 2025
Treasurer, then President Columbia Valley Condominium Association for 5 terms 2020-2025
Member, Board of Directors, Groundswell Network Society, 2024

POSITIONS HELD

UTW Management
Managing Partner 2020 -

Trafigura Trading
Head of Compliance, NA Region 2021-2023

Brookfield Renewable
Director, Compliance & Ethics, North America 2016-2021
Director, Energy Marketing Compliance & Operational Risk 2015-2016

Capital Power Corporation and EPCOR Utilities 2009- 2015
Senior Advisor Compliance and Ethics
Project Management, Implementation, Process Design & Improvement – Consulting Service
Senior Advisor, Business Transformation

CIBC 1999-2009
Senior Manager, Western Regional Operations
Senior Manager Quality Assurance and Continuous Improvement
Manager, Operations Support

FORMAL EDUCATION
Master of Business Ethics & Compliance (MSc) – New England College of Business (now Cambridge College)
Bachelor of Commerce – University of Calgary

CERTIFICATIONS
Society of Compliance & Ethics Professionals – CCEP Designation
Institute of Certified Records Managers – CRM Designation

Mitchell Wright, BSc.

Mitchell Wright BSc.

328 21st Ave SW
Calgary, Alberta T2S 0G8
Cell: 403.471.2456
E-mail:
Mitch.w13@hotmail.com

CORE COMPETENCIES

- Advanced ArcGIS and AutoCAD
- Asset Management
- Communications
- Contract Management
- Stakeholder Relationships
- Emergency Management
- Geotechnical and Flood Mitigation Concepts
- Nature-based Solutions and Climate Adaptation
- Project Management

PROGRAMS

- Adobe Suite
- ArcGIS
- AutoCAD
- Eventbrite
- Geostudio
- Gsuite
- HECRAS
- Microsoft Office
- Presentations
- SketchUp
- Smartsheets
- Ungerboeck

CERTIFICATIONS

- Economic Corridor taskforce Committee (GOA)
- ESRI Courses
- ICS-100 (AMHSA)
- Nature-based Solutions for Disaster and Climate Resilience (UN)
- WHMIS

EDUCATION

BSc. Civil Engineering – University of Calgary, Schulich School of Engineering (2023)

Notable Experience – Geotechnical Capstone: Tailings Dam Design

PROFESSIONAL EXPERIENCE

Localis Corp. – High River, AB (Jan 2025 – Current)

Civil Engineering EIT, Contract – (Jan 2025 – Current)

- Geospatial analysis and material creation.
- Financial forecasting review and report preparation.

The Calgary Stampede – Calgary, AB (Jan 2024 – Current)

Park Operations Manager, Contract – (Jan 2024 – Current)

- Project Manager, people leader, and budget manager.
- Project include full site renovations, utility planning, capital project submission and scope creation, annual forecasting for the organization.
- Lead a zone for the annual planning of the Calgary Stampede – a ten-day event that received 1.48 million visitors in 2024. Oversaw resource allocation to execute operational plans, align with corporate sponsorship commitments and work closely with various volunteer committees.

World Petroleum Congress – Calgary, AB (Aug 2023 – Oct 2023)

VIP Services/Protocol & Speaker Management

- Prepared a "Scenario Handbook" for print publication containing the individual scenarios for World Energy Ministers.
- Data management for the Speakers Management Program, Ministers Delegate Information, VIP tracking, Ministerial Reception, Opening Ceremonies seating plans, and accommodation tracking.
- Preparation of correspondence to various stakeholders, and scenarios to be integrated with the Congress Mobile App. Developed an orientation manual for liaison officers, assisted with training, and acted as a support International Liaison Officer for every country.
- Assisted with operations under the WPC Chief Operation Officer. Prepared a legacy report.

The Calgary Stampede – Calgary, AB (Feb 2023 – Aug 2023)

Project Coordinator, Seasonal Contract – (Apr 2023 – Aug 2023)

- Established a task-based planning document for the setup of the annual Calgary Stampede in its entirety.
- Organized and liaised all trade-related tasks for all departments and site activations utilizing the smart sheets program.
- Initiated and analyzed capital projects and day-to-day operational organization.

AutoCAD Technician, Seasonal Contract - (Feb 2023 – Apr 2023)

- Tasked with creating and maintaining all technical drawings utilized by The Calgary Stampede organization.
- Reviewing new construction designs, creating floor plans and layouts for many large-scale events, and facilitating design meetings.

Darwin Durnie Consulting Corporation (ddcc) (May 2021 – Current)

Rocky View County Budget and Service Delivery Review – Calgary, AB (Jul 2023 – Aug 2023)

- Conducted comprehensive reviews of the County's annual budget, examining revenue and expenditure trends, variances, and cost drivers.
- Generated recommendations for optimizing budget allocation and service delivery, ensuring alignment with County objectives and strategic priorities.
- Evaluated the effectiveness and efficiency of current service delivery models across various departments and well as identified areas for potential consolidation, outsourcing, or process enhancement.

Commonwealth Games Bid Proposal – Security Branch – Calgary, AB (Jul 2023 – Aug 2023)

- Collaborated with key stakeholders to design and develop a comprehensive security strategy aligned with the requirements and guidelines of the Commonwealth Games Federation.
- Developed a risk assessment report to identify potential security threats and vulnerabilities as well as mitigation measures.
- Established protocols for responding to security incidents, including communication plans, evacuation procedures, and post-incident debriefing.

Drumheller Flood Mitigation Program – Engineering Intern – Drumheller, AB (May 2021 – Aug 2022)

- Undertook research on innovative approaches to flood management that support adaptation to Climate change impacts.
- Liaised with local governments, provincial agencies, and other organizations to acquire relevant studies, reports, data, and information.
- Prepared briefing notes, progress reports, and PowerPoint presentations that shared research findings at meetings and workshop events.
- Applied project management and engineering basics to oversee 5 project engineering consultants, land surveyors, and planners.

Alberta Economic Corridors Taskforce – Engineering Intern – Edmonton, AB (May 2021 – Aug 2022)

- Support and assist in the exploration of concepts of economic corridors as strategic infrastructure aimed at getting Alberta goods, services, and natural resources to market while creating jobs.
- The committee was put together with multiple representatives with over 20 industry specialty stakeholders.
- Focus areas were National, International, and Provincial, generated from the lens of Treaties 6, 7,8 territories.

Canadian Standards Association: Natural Disaster Risk Mitigation, NbS for Flood and Erosion Management at a River Basin Scale – Engineering Intern – Calgary, AB (May 2021 – Aug 2022)

- Participated and supported ddcc in multiple focus groups and committee meetings associated with the Canadian Standards Association review of existing policy regarding flooding and erosion in Canada.
- This resulted in creating a guidance document by CSA for all government orders on applying nature-based Solutions to mitigate flooding and erosion.
- Report published Spring 2023 – Titled: Managing Flooding and Erosion at the Watershed Scale: Guidance to Support Governments Using Nature-Based Solutions, Canadian Standards Association by Intact Centre (University of Waterloo).

Walking Together: Pope Francis in Canada, Canadian Council of Catholic Bishops, Vatican – Engineering Intern – Edmonton, AB (May 2021 – Aug 2022)

- Special assistant and tech support to the Executive Team
- Played a large supporting role in the coordination, run of the show, procurement, government relations, and event organization.
- Created the geospatial mapping of the sites and layouts and on-the-ground activities during 3 days of visits of His Holiness to Indigenous communities in Alberta.
- Nominated and received an audience with His Holiness for performance.

Pieridae Energy Limited – Rocky Mountain House, AB (May 2019 – Sept 2019)

Student Well Operator

- Operating and maintaining sour gas wells and facilities.
- Maintained logs and ledgers of data acquired per company and customer requirements.
- Installed equipment as needed.
- Learned to gather and record data and operate equipment by Production / In Line Well Testing, Stimulation Recovery and or Flowback to Customer and Company standards of excellence.

EXTRA-CURRICULAR

Calgary Stampede Youth Volunteer

- For 10 Days, From July 2013 – 2017, Paid Worked 2015 - 2017
- Interacting with patrons and informing them of the events and activities available to them.
- Supported the catering department in year-round events focused on guest interaction.

The Drop-In Centre

- Serving food to residents.
- Organization of clothing in the warehouse.

Beaupre Community Hall

- Volunteering for event support at my local committee center.

REFERENCES

Darwin Durnie
President – Darwin Durnie Consulting Corporation
Email: dkdurnie@gmail.com

Michelle Tetreault
President – Public Works Management Corporation
Email: mmtetreault@gmail.com

Barry Davidson
CEO - Davidson Global Advisory Group
Email: Barry@davidsonglobal.ca

Albert Flootman
Principal - Localis
Email: albert.flootman@localisplanning.com

Derrick Cowie
Manager, Park Development - Calgary Exhibition and Stampede Ltd.
Email: dcowie@calgarystampede.com

Ashlee Lamontange
Manager, Business Operations, Park & Facility Services - Calgary Exhibition and Stampede Ltd.
Email: alamontange@calgarystampede.com

Avodahtec

Response to Request for Proposal

AB 2025-04172: Infrastructure Audit – Village of Cremona

Avodahtec Inc.

PO Box 25511, Edmonton RPO Callaghan, AB, T6W 4N8

July 9, 2025
Re: RFP- Infrastructure Audit for the Village of Cremona (AB-2025-04172)

Dear Karen O'Connor,

We are pleased to submit our proposal for the subject RFP, a pivotal initiative that will enhance the Village of Cremona's infrastructure management and long-term sustainability. At Avodahtec, we take pride in delivering high-impact solutions that are rooted in a deep understanding of asset management and operational efficiency. Our team is fully prepared to provide the Village with a clear, actionable strategy that not only meets immediate requirements but also secures the future resilience of your critical infrastructure.

We recognize the urgency and importance of this project, and we are committed to bringing our proven expertise in risk-based assessments, capital planning, and resource optimization to bear. Our approach ensures that every asset is rigorously evaluated and prioritized, so that your team can make the right investment decisions safely, efficiently, and with confidence.

The scope and complexity of the Village's needs are significant, and our team is uniquely equipped to handle them. From comprehensive risk analysis and condition assessments to developing detailed 10-year capital and operational plans, our approach is methodical, data-driven, and results-oriented. We will work alongside your team to define clear priorities and ensure that both short- and long-term goals are achieved within budget, on time, and to the highest standards.

The attached proposal outlines a timeline, scope of work, and deliverables that reflect our commitment to delivering maximum value to the Village. Our goal is clear: to empower the Village of Cremona with the tools, strategies, and resources required to navigate its future infrastructure challenges with confidence and precision.

We are ready to move forward and execute this project without delay. Please don't hesitate to contact me directly should you require any further information or wish to schedule a meeting to discuss the next steps. Thank you for your time and consideration. We look forward to working with you to ensure the Village's infrastructure is well-managed, sustainable, and positioned for long-term success.

Kind regards,

Olugbenga Ibikunle Ph.D., P.Eng., CRL, MBA
Managing Partner | Project Technical Lead
(780) 905-5534
Olugbenga.Ibikunle@avodahtec.com

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1.0 PROJECT UNDERSTANDING AND SCOPE

1.1 Project Background and Understanding

Avodahtec understands that the Village of Cremona is seeking an infrastructure audit to support a viability review as directed by the Minister of Municipal Affairs. This review aims to evaluate the municipality's infrastructure, governance, financial standing, and ability to manage risks while maintaining service levels. The audit will provide critical information about the current state of the municipality's major assets and infrastructure, supporting potential decisions related to the viability and, if necessary, dissolution of the municipality.

Avodahtec's role in this process will be to provide accurate, detailed insights into the condition and capacity of Cremona's infrastructure. Our work will help inform the viability review support group and ensure that recommendations are based on reliable, up-to-date data. Funded through the Alberta Community Partnership grant, this audit will provide actionable plans for the municipality and any potential receiving entity, outlining clear steps forward to address current infrastructure challenges or support a transition.

1.2 Project Scope and Deliverables

Avodahtec will undertake the following key tasks to deliver the infrastructure audit, guided by the requirements of the RFP:

1. **Infrastructure Assessment:** Comprehensive evaluation of the municipality's infrastructure condition, capacity, and associated risks.
2. **Options Analysis:** Evaluation and analysis of feasible options to address identified infrastructure needs and risks.
3. **Prioritized Action List:** Creation of a prioritized list of actionable recommendations, guiding infrastructure improvements and resource allocation.
4. **Capital Plan:** Development of a detailed, 10-year capital plan outlining future investments, maintenance schedules, and required resources.
5. **Operating Plan:** Formulation of a long-term operating plan for the municipality's infrastructure, ensuring sustainable management and maintenance of existing assets.

In addition to these tasks, Avodahtec will manage the overall project, ensuring effective coordination, communication, and timely delivery of all required outputs throughout the project lifecycle.

1.3 Asset and Infrastructure Overview

Table 1 below provides a comprehensive summary of the key infrastructure and assets under consideration for the infrastructure audit of the Village of Cremona. It includes detailed information about the condition, age, and maintenance status of critical components within the water, wastewater, storm drainage, transportation, and municipal facilities systems. This overview will serve as the foundation for evaluating current capabilities, identifying areas of concern, and prioritizing improvements as part of the overall viability review process.

Table 1: Overview of Village of Cremona's Infrastructure and Assets

Category	Asset/Infrastructure	Details
1. Distribution System	Water system components	Groundwater wells, raw water pipelines, 614 m³ treated water reservoir, 73 m³ clear well, distribution pumps, distribution piping. Age: 1962 to recent installation.
2. Groundwater Supply	Wells and related assets	Wells #12, #14 (new); Well #1 (adjacent to WTP); Wells #3, 6, 7, 8, 9 abandoned; Well #11 (unlicensed); 2024 repairs to Wells #114 and #112 (valves, pumps, motors).
3. Water Treatment Plant	Treatment and storage	614 m³ steel reservoir, 73 m³ concrete clearwell; chlorine pump, compressors, transfer pumps replaced in 2024. Storage is suitable for 550 people.
4. Fire Hydrants	Fire Hydrants	17 hydrants, maintained in Fall 2023 with repairs to four units.
5. Pumphouses / Bulk System	Bulk Water Station	2023 $150,000 upgrades (fire station pump, large valve); 1999/2000 5.9 Cummins generator.
6. Wastewater System	Collection & Lagoons	No lift stations (gravity-based); two-cell lagoon (1962), upgraded in 1982. Mains are primarily Vitrified Clay Tile (VCT), with newer PVC in recent developments. Expansion needed for population >550.
7. Irrigation System	Irrigation System	V10 motor, ½ km wheel & piping; annually maintained.
8. Storm/Drainage	Storm Mains	Mains are located in the lower blocks of each street (8 blocks).
9. Transportation	Roads & Sidewalks	Paved: Centre Street, First Ave, First St. West, Edey Close, First St. East (2020). New sidewalk installed on First Ave (2022). Additional sidewalks & concrete stages in 2024.
10. Facilities and Buildings	Government & Community Buildings	Council Chambers/FCSS (old United Church), Public Works Shops (3200 sq ft), Storage Yards (42000 sq ft), Water Treatment Plant (3000 sq ft).
11. Public Spaces	Parks	Edey Close green space, Cremona Walking Trails & Gazebo, Anniversary Park, Cremona Heights green space.
12. Cemeteries	Cemetery Lots	Lot 1 (0.882 ha), Lot 2 (N.W. ¼ Sec 35).
13. Vehicles and Equipment	Fleet & Equipment	2010 Ford Range, 2005 F350 Gas, 2001 Chev K3500-Diesel, 2012 Skid Steer, 2010 Kubota mower, 2022 John Deere mower, 2021 Deck trailer, Push lawn mower (2018), Grass trimmers (2020, 2023), 2004/05 Irrigation system, 2024 Sander/Spreader (new).

1.4 Key Project Exclusions

The following elements are excluded from the scope of this infrastructure audit:

1. **Fleet Assets:** The audit will not include municipal fleet assets.
2. **External Assets:** Property and assets owned or operated by external entities such as neighboring municipalities, regional service commissions, etc., are excluded.
3. **Recent Assessments:** Any condition assessments recently completed by the municipality and made available to Avodahtec for review are not part of the audit.
4. **Growth Considerations:** The audit will not consider future growth or the infrastructure required for anticipated growth.
5. **Detailed Design:** The scope does not include the detailed design of any recommended infrastructure options.

1.5 Potential Risks and Corresponding Mitigation Strategies

The successful completion of this project relies not only on the engineering team's understanding of the requirements but also on effectively managing potential risks. Our proactive project management approach involves identifying key risks early and implementing robust mitigation strategies to ensure timely delivery and high-quality outcomes. Drawing from our experience delivering infrastructure projects across Canada, we are committed to addressing these challenges head-on.

Based on our review of the RFP and prior experience, we have identified several risks and developed initial mitigation strategies, as outlined in **Table 2**. Upon project initiation, we will formalize these into a comprehensive Risk Register, collaborating closely with the Village to refine and expand it as needed.

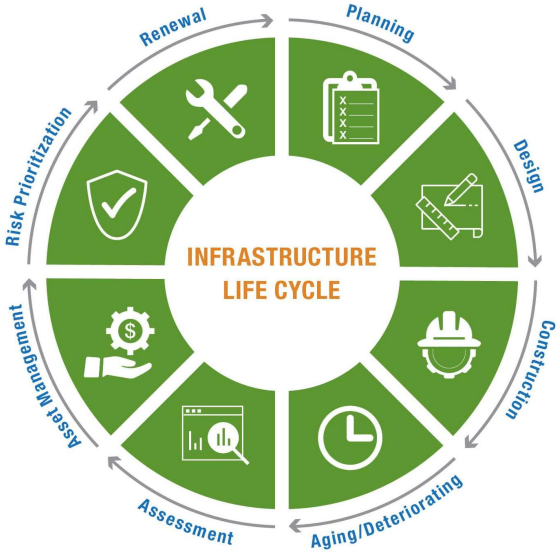
Table 2: Potential Project Challenges, Risks, and Mitigation Measures

Potential Project Challenge/Risk	Mitigation Measures (Team Approach)
Inaccurate or Incomplete Data Collection	We'll ensure comprehensive data collection by aligning with the Village's team to verify data completeness upfront. If gaps arise, our team will immediately work with the Village to close them, ensuring no delays or compromises to project scope.
Project Scope Creep or Misalignment of Expectations	We'll engage with the Village early and often to clarify expectations and project scope. Our team will implement a structured scope change process and ensure regular check-ins with stakeholders to avoid any scope creep.
Resource Constraints (Staff, Equipment, Budget)	Our team will carefully allocate and track resources from day one, ensuring we have backup options in place for any shortages. If we anticipate resource gaps, we'll immediately take corrective action, reallocating where necessary to stay on track.
Unforeseen Regulatory or Compliance Issues	We will stay on top of all regulatory changes and continuously check for compliance throughout the project. If new requirements arise, our team will proactively integrate them into the project scope, ensuring no delays.
Stakeholder Miscommunication or Lack of Collaboration	We will set up clear communication protocols early on, with regular updates and collaborative sessions to ensure all stakeholders are aligned. Our team will facilitate a structured communication plan to prevent any misunderstandings.
Budget Overruns or Cost Escalation	We will implement rigorous budget monitoring to identify potential overruns early. Our team will adjust project timelines or scope as needed to ensure the project stays within budget, exploring alternate funding sources if necessary.
Delays in Approval or Decision-Making from Stakeholders	We will maintain a proactive approach, regularly engaging with the Village and stakeholders to keep decision-making on track. If delays occur, our team will help escalate issues to ensure timely approvals and keep the project moving forward.
Inability to Coordinate Multi-Disciplinary Teams Effectively	Our team will foster a collaborative environment with clear roles and responsibilities using a RACI matrix. We'll hold regular cross-disciplinary meetings to ensure efficient coordination and minimize bottlenecks.
Risks from External Factors (e.g., weather, political changes)	We will closely monitor external factors and build contingencies into our schedules. If any external factors pose a risk to the project, our team will adapt quickly, adjusting timelines or scope while maintaining quality standards.

2.0 OVERALL PROJECT DELIVERY METHODOLOGY AND APPROACH

2.1 Introduction

At Avodahtec, we recognize that the future viability and sustainability of Cremona's municipal infrastructure depend on a strategically integrated, data-driven, and risk-aware approach. Over the last two decades, concerns regarding the financial sustainability of municipal infrastructure have grown across North America. In response, we are committed to collaborating closely with the Village of Cremona to address both its immediate and long-term infrastructure needs, ensuring the resilience, sustainability, and operational efficiency of its assets.



Our team understands that the primary goal of asset management projects—such as the Infrastructure Audit—is to support the Village in achieving a practical balance between service levels, costs, and risk. To ensure our approach is both effective and locally relevant, we will prioritize Alberta and Canadian asset management frameworks, including the Alberta Asset Management Framework, the Federation of Canadian Municipalities (FCM) Asset Management Readiness Scale, and best practices promoted by the Rural Municipalities of Alberta (RMA). These guidelines are specifically designed to meet the needs of small and rural communities. Where beneficial, we will also incorporate internationally recognized standards such as ISO 55000 and the International Infrastructure Management Manual (IIMM). These will complement local practices by enhancing areas like risk management, long-term sustainability, and return on investment, and will be applied in a way that aligns with the Village's current asset management maturity level.

This high-impact, collaborative approach is grounded in the foundational principles of asset management, financial sustainability, risk mitigation, and environmental stewardship. Through comprehensive planning and innovative solutions, we empower the Village to proactively manage its infrastructure, addressing both current challenges and future opportunities.

2.2 RACI Model for Effective Project Implementation

Given the multifaceted nature of the municipal infrastructure assessment and development project, such as this, which involves multiple stakeholders, departments, and expertise areas, Avodahtec will implement the **RACI Model** (Responsible, Accountable, Consulted, Informed). This approach will ensure that each task within the roadmap has clear ownership, minimize the risk of missed deliverables, and streamline communication and coordination.

By applying the **RACI framework**, we will foster a transparent and collaborative working environment. This will facilitate smoother project execution, better alignment of responsibilities, and more efficient decision-making, ultimately leading to a successful outcome. The RACI model will be applied to both capital planning and operational implementation activities, ensuring that all stakeholders are appropriately engaged. **Table 3** is an example of how the RACI matrix could be

applied to key tasks within the infrastructure assessment and development process for the Village of Cremona.

Table 3. Example RACI Matrix for Infrastructure Assessment and Planning Implementation

Task #	Responsible	Accountable	Consulted	Informed
1. Define Infrastructure Assessment Goals	Asset Management Team	Project Manager	Public Works, Finance Department	Municipality Council, Staff
2. Data Collection & Condition Assessment	Field Assessment Team	Director of Public Works	IT Department, Technical Consultants	Municipality Council, Residents
3. Risk and Failure Analysis	Asset Management Team	Project Manager	Environmental Consultants, Technical Experts	Municipality Council, Relevant Stakeholders
4. Prioritize Capital Investment Actions	Asset Management Team	Director of Public Works	Finance Department, Public Works Department	Municipality Council
5. Develop a 10-Year Capital Plan	Capital Planning Team	Director of Public Works	Finance Department, Engineering Department	Municipality Council, Staff

2.3 Specific Methodology and Approach for the Expected Professional Services

Based on our understanding of the RFP, there are six (6) key requirements, which we have tagged tasks, as detailed below:

- Task #1: Infrastructure & Asset Initial Risk-Based Condition Assessment
- Task #2: Detailed Asset Risk Analysis & Prioritization
- Task #3: Options Assessment & Analysis
- Task #4: Develop a Prioritized Action List
- Task #5: Develop a Ten-Year Capital Plan
- Task #6: Develop an Operating Plan

To maintain alignment with the Village's overall organizational goals and objectives, we will start this assignment by reviewing the Village's Strategic Plan, Asset Management Policy, and Strategic Asset Management Plan (if available). These documents help align an organization's asset management activities and the outputs from its assets with its overall organizational objectives. Doing this will ensure that the deliverables align with the Village's overall goals and objectives as a municipality. Examples of information we look to gather from these documents (or through interaction with the Village's project team if these documents are not available or sufficient) include:

- Village's long-term approach to management of its physical asset;
- How the Village objectives are to be converted into asset management objectives;
- The Village process for determining long-term renewal, enhancement, and maintenance work volumes;
- The Village's level of risk appetite; and,
- Strategic KPIs and targets.

2.3.1 Task #1: Infrastructure & Asset Risk-Based Condition Assessment

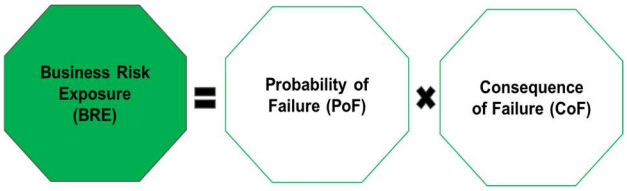
To meet the condition and risk assessment requirement for the major infrastructure and assets listed in **Table 1**, Avodahtec will carry out a thorough and systematic evaluation of each asset's current state. This will allow us to generate an accurate condition rating for each asset and assess potential risks associated with failure or degradation.

a) **Asset Data Review and Analysis**: We will begin by reviewing all available documentation related to the infrastructure and assets under consideration. This includes the list of background information and reports listed on the RFP. This review will help us gain a foundational understanding of the existing systems, asset inventories, and the operational performance of key infrastructure components.

b) **Site Visits and Field Assessment**: As part of our approach, we assume that site visits will be required to assess key infrastructure components, including the water treatment plant, wells, reservoir, pump house, and portions of the collection system. Our scope includes up to three (3) days of on-site inspection, to be coordinated in advance with Village staff to ensure efficient access and coverage.

c) **Detailed Asset Desktop Assessment**: We will perform a detailed desktop condition assessment for each listed asset category (Table 1). Using the guidelines of IAM, International Infrastructure Management Manual (IIMM), ISO55000, Canadian Infrastructure Report Card (CIRC), and the Canadian Network of Asset Managers (CNAM) Asset Management 101 Booklet, we will assess:
   - Age, material type, and previous maintenance history for each asset.
   - Operational performance, ensuring compliance with health, safety, and environmental standards.

d) **Risk-Based Condition Rating** system will be applied, combining the Likelihood of Failure (LoF) and the Consequence (or Impact) of Failure (CoF) for each asset. The mathematical combination of the LoF and CoF will generate a ***Business Risk Exposure (BRE)*** rating for each of the assets and be used to inform which assets are most critical for intervention, based on their BRE rating. This BRE approach assesses the potential impact on the Village if assets fail. ***Dr. Olugbenga Ibikunle***, our Technical Lead, has published multiple journal articles on this method in ASCE platforms and has successfully used it in a similar manner across North America. This approach will help the Village direct investment and resources toward high-priority areas, actively mitigating non-tolerable risks through the asset management planning process.



   - PoF (or LoF) is the Probability or Likelihood of Failure, calculated from the asset condition assessment efforts under Task #1. The asset condition score will be used as a proxy for its PoF (or LoF)

- CoF is the Consequence (or Impact) of Failure, and it measures the direct and indirect impacts of an asset failure based on pre-determined consequence categories. Asset owners' consequence categories (e.g., Operations, Financial, HSE, Reputation, Regulatory, etc.) are typically documented in their Asset Management Policy and Strategy.

TASK #1 Sub-Deliverables:

- Condition and Risk Assessment documentation, summarizing the current state, criticality, and risk of each asset.
- BRE Scores for prioritization of assets and investments.

2.3.2 Task #2: Detailed Asset Risk Analysis & Prioritization

To assess the risks associated with each asset and determine the impact of failure, we will conduct a comprehensive risk analysis for each asset and associated components. This will inform decision-making and allow for a ***prioritization of critical actions***. We will build on the BRE analysis completed for each of the assets discussed above.

a) **Risk Matrix & Impact Analysis**: Avodahtec will use the BRE scores to risk-profile all the assets following the 4X4 Risk Matrix, provided in the RFP (shown below), to evaluate the severity and likelihood of each asset's failure. We will apply a scale of 1 to 4 for impact and likelihood, as per the RFP – Low Impact, Moderate Impact, High Impact, and Intolerable Impact.

		Consequence / Impact			
		1 – Low	2 – Moderate	3 – High	4 – Intolerable
Likelihood	1 – Improbable	P3	P3	P2	P2
	2 – Possible	P3	P2	P2	P2
	3 – Likely	P2	P2	P2	P1
	4 – Almost Certain	P2	P2	P1	P1

b) **Risk-Based Prioritization:** Using the Risk Matrix, built from the BRE scores, we will classify each asset's risk as follows. The priority will be assigned based on the 4X4 Risk Matrix above, using the definitions provided in the RFP.

- P1 (High Priority): Critical failure potential with intolerable impacts.
- P2 (Medium Priority): Moderate failure risks requiring timely intervention.
- P3 (Low Priority): Minimal failure risks that can be deferred or managed over time.

TASK #2 Sub-Deliverables:

- Risk Assessment Matrix showing risk levels for each asset.
- Prioritized Action List based on the combined LoF and CoF, detailing the most urgent assets requiring attention.

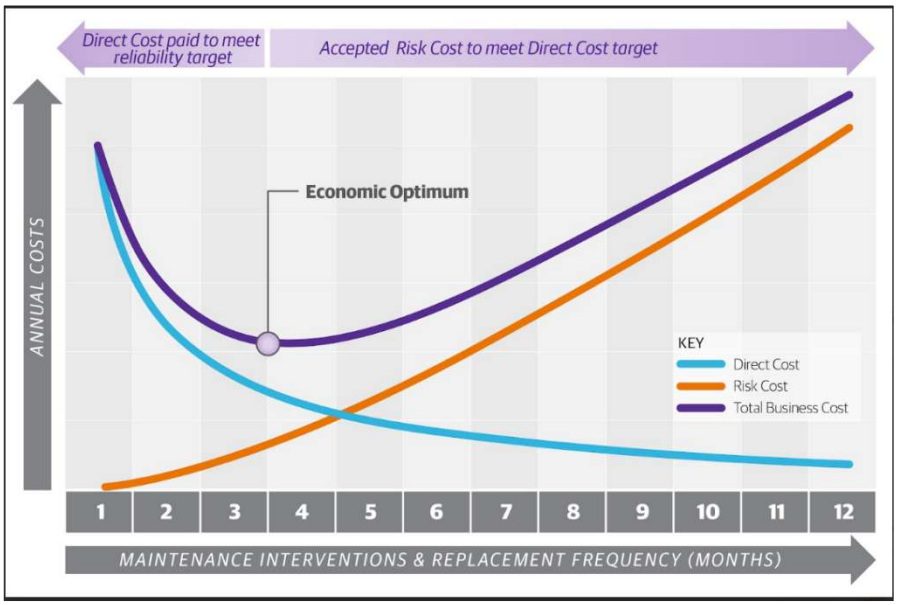
2.3.3 Task #3: Options Assessment & Analysis

Once we have assessed asset conditions and risks, we will develop a range of options for ***repair, rehabilitation, or replacement***, aligning with the Village's long-term goals for economic and environmental sustainability. This will be guided by the corresponding risk-based condition assessment ratings of the assets.

a) **Option Development:**

1. **Capital Options**: Propose options for **replacement**, **rehabilitation**, and **upgrades** based on asset age, condition, and risk.
2. **Operational Options**: Explore **procedural and operational improvements** that may mitigate risk, reduce costs, or extend asset life (e.g., enhanced maintenance protocols, updated resource management strategies).
3. **Level of Service Adjustments**: Where appropriate, we will consider **reductions in service levels**, such as **decommissioning assets** or transitioning to **lower-cost alternatives** (e.g., gravel roads instead of paved surfaces).

b) **Lifecycle Cost Analysis (LCC)**: For each option, we will calculate the **lifecycle costs** (including capital, maintenance, and operational costs) and assess the **cost-benefit** of each option. The aim will be to assign an option that provides *optimum economic benefits* to the Village for all scenarios (see image below for illustration). We will do this by balancing risk, cost, and level of service.



TASK #3 Sub-Deliverables:

- Options Assessment Report with detailed alternatives for each asset or system, highlighting the financial and operational implications.
- Cost/Benefit Analysis of each option, including estimated cost savings and long-term benefits.

2.3.4 Task #4: Develop a Prioritized Action (Option) List

Avodahtec will collaborate with municipal staff and stakeholders to finalize the Prioritized Action List, ensuring that the most urgent and impactful actions are addressed in the short term, while also planning for medium- and long-term asset management. We will be guided by the RACI model described earlier. Note, Tasks #3 and #4 are intertwined and will be completed in tandem.

a) **Stakeholder Workshops:** Through **consultation sessions** with municipal leaders and operational staff, we will refine the options developed under **Task #3** and prioritize them based on community needs and financial resources.

b) **Risk and Consequence Mapping:** We will apply the **Risk Matrix** to allocate **P1 (high priority)**, **P2 (medium priority)**, and **P3 (low priority)** labels to each recommended action.

c) **Cost Estimation:** For each recommended action (or option), we will estimate the **capital cost** and **duration**, ensuring that **P1 actions** are prioritized for immediate implementation. The capital project cost estimates will be for pre-design assumption (Class D - +-20-30%). Note: This cost estimation will have been completed as part of Item (b) under Task #3.

TASK #4 Sub-Deliverables:

- Prioritized Action List broken down by priority and asset category, along with estimated costs and timelines for execution.

2.3.5 Task #5: Develop a Ten-Year Capital Plan

Avodahtec's approach to developing the Ten-Year Capital Plan will be comprehensive and aligned with the Village of Cremona's goals for long-term financial sustainability, risk management, community needs, and according to the Village's strategic goals. Our methodology will incorporate a collaborative and data-driven process to ensure that all Priority 1 (P1) actions are addressed within the first five years, while medium (P2) and lower priority (P3) actions are phased in throughout the ten-year period. We understand that Avodahtec will facilitate a half-day workshop/discussion with the council and key staff members to set the capital plan.

a) **Workplan Development:** Working closely with the Village's leadership and the project team, we will create a **detailed 10-year capital plan** that specifies which actions will be executed in each year, considering available **funding sources** (e.g., reserves, grants, debenture borrowing).

    - **Priority 1** actions will be addressed in the first five years to mitigate immediate risks.
    - **Priorities 2** and **3** actions will be phased in gradually, considering urgency and available resources.
    - We will integrate available funding sources such as municipal reserves, grants, and debenture borrowing to maximize resources.

b) **Coordination of Projects:** We will look for opportunities to **coordinate actions** (e.g., replace roads and underground utilities simultaneously) to **maximize efficiency** and minimize overall costs.
c) **Financial Sustainability:** The plan will include a financial strategy that estimates the cost of capital actions and identifies available funding sources, addressing both short-term and long-term needs. We will explore a mix of funding sources, including capital grants, municipal reserves, and debt financing, ensuring affordability and sustainability.

TASK #5 Sub-Deliverables:

- Ten-Year Capital Plan: A clear, actionable plan with an annual breakdown of capital projects, total costs for each year, and prioritized actions (P1, P2, and P3).
- Funding Strategy: Identifying funding sources for each project and highlighting any potential funding gaps, along with strategies to address them.

2.3.6 Task #6: Develop an Operating Plan

In parallel with the capital plan, while still working collaboratively with the project team, we will develop an **Operating Plan** that addresses the ongoing maintenance and operational needs of municipal assets, ensuring that day-to-day operations are well-coordinated, adequately resourced, and funded.

a) **Operational Actions**: We will identify and prioritize the operating actions required to maintain assets at their optimal levels, based on the Prioritized Action List. This will ensure operational readiness while minimizing risks and disruptions.

    - Each operating action will align with specific asset management goals, focusing on maintaining or improving the functional performance of critical assets.

b) **Resource Allocation:** The Operating Plan will specify the necessary resources (staffing, equipment, materials, and budget) required to execute the operational actions efficiently.

    - This includes setting clear expectations for staffing levels, training, and equipment requirements, ensuring that resources are available to carry out ongoing maintenance activities.

c) **Funding Strategy:** We will outline the sources of funding for operational actions, ensuring that adequate resources are allocated for the ongoing maintenance and upkeep of the infrastructure. We will consider both internal funding sources (e.g., operational budgets, reserves) and potential external funding (e.g., grants).

TASK #6 Sub-Deliverables:

- Operational Plan: A detailed document outlining the required maintenance activities, resource allocation, and budget considerations for all critical infrastructure.
- Funding Strategy: A comprehensive plan for ensuring the financial sustainability of ongoing operations, identifying funding sources, and addressing any potential gaps.

2.4 Project Management and Project Delivery

Active and effective project management is essential in delivering a quality project on time and within budget. Our project team has decades of combined experience in delivering similar municipal infrastructure projects. To ensure the successful implementation of this project, Avodahtec will employ the best practice Project Management methodology. This approach will encompass meticulous planning, effective resource allocation, and continuous monitoring and evaluation to achieve the project objectives At the kick-off meeting, a clear and common understanding of the project objectives, schedule, and lines of communication will be a key focus to foster open and candid discussions. We plan to communicate consistently, proactively, and often. Avodahtec will chair the kick-off and regular meetings through all project stages and distribute meeting minutes to all parties.

2.4.1 Project Management Services

Our project team will oversee and execute the following initiatives across all phases of the project lifecycle, from initiation and planning through execution, monitoring, and control, to formal close-out, ensuring alignment with project objectives, timelines, and stakeholder expectations:

- Project management services to facilitate the proper implementation of the project; provide direction and coordination; monitor and control each activity within the budget and schedule allocated; and facilitate the successful interaction of all stakeholders.
- Monthly reports documenting work progress, upcoming tasks, and updated project schedule.
- Assist with developing cash flow projections as required, identify budget variance, and prepare related documentation.
- Conduct/attend regular project meetings. Our team will record and distribute meeting minutes.
- Represent and advise the Village on any technical matters arising directly from the project and/or third-party discussions; actively manage a risk register to monitor and appropriately mitigate risks.
- Implement the Village's and Avodahtec's Environmental Health and Safety Guidelines and monitor requirements.

2.4.2 Project Initiation Meeting

At the project's onset, a virtual project kickoff meeting is proposed. This meeting is intended to introduce the team members, review the management and communication approaches, and review the project's methodology/approach and schedule. Items to be discussed include, but are not limited to, the following:

- Project Work Plan
- Project Schedule
- Communications Plan & Platforms
- Permitting and Approvals Approach
- Preliminary Risk Register & Assumptions
- Scheduling of Project Meetings
- Deliverables and the Village's Review Periods, and the associated levels of effort
- Project Specific Questions - constraints and alternatives to consider

2.4.3 Progress Meetings

During this project, regular progress meetings will be held bi-weekly or at an agreed time. At these scheduled meetings, we will provide updates on work progress, receive feedback, review the risk register, facilitate communication/information transfer, and obtain the Village's input. Meeting agendas and minutes will be recorded and distributed. In addition to the formal monthly progress meetings, it is proposed that our Project Manager and the Village's Project Manager schedule regular meetings, whenever necessary, to discuss progress via a Team meeting. The intent is that these meetings would be informal discussions in the 10 to 15-minute range on an as-needed basis. Our PM will provide an overview of progress and budget and identify potential variances immediately. Any outstanding needs and/or actions will also be discussed and documented in our actions log. The outcome is that both project managers will always be fully aware of the status and will work together to ensure the project is completed efficiently.

2.4.4 Deliverable Review Meetings

For the project's main deliverables (***Infrastructure Audit Report)***, our team will submit the report first in draft form for the Village's review, with a pre-scheduled review period. A comment log will be supplied and used to track comments and revisions of the report. A review meeting will be scheduled shortly thereafter to discuss comments, questions, and/or requests for revisions by the Village.

2.4.5 Development of Project Work Plan (PWP)

A multi-task project such as this requires a fit-for-purpose Project Work Plan (PWP). Therefore, following the project kickoff meeting, our team will prepare and submit a PWP to the Village for review and approval. The PWP will document the project management approach, roles and responsibilities, and processes to ensure the project's scope, budget, and schedule are met at the expected quality. Our PWP will include the following minimum information:

- Scope verification and management process,
- Project contact list, inclusive of roles and responsibilities,
- QAQC processes,
- Communication logs (action, comment, etc.)
- Schedule control processes,
- Risk management and risk register,
- HSE, and
- Communication plan and framework.

In addition to the PWP, our team will provide the Village with monthly status reports containing the following information at a minimum:

- Work completed during this period and overall completion status,
- Any delays, risks, and mitigation strategies,
- Work planned for completion next month,
- Cost summary of all Work completed,
- Remaining budget, and
- An updated project schedule.

2.5 Clear and Impactful Project Deliverables

Our methodology will culminate in a set of **clear, actionable deliverables** that empower the Village with the tools to make effective decisions now and in the future. We will combine all the sub-deliverables from each of the tasks described in **section 2.3** into one report (i.e., the '***Infrastructure Audit Report'***) consisting of three sections:

- **Executive Summary Report:** A high-level summary highlighting key findings, **prioritized actions**, and **capital plan** in an easy-to-understand format for stakeholders and the public.
- **Detailed Findings & Analysis:** A comprehensive report detailing **methodologies**, **findings**, and **recommendations** based on rigorous data collection, asset assessments, and stakeholder input.
- **Detailed Capital & Operating Plans:** Well-defined **10-year capital** and **operating plans**, including clear recommendations for **investment**, **funding sources**, and **sustainability goals**.
- **Financial Forecasts:** Clear cost estimates and financing options to ensure that investments are made responsibly and within the Village's financial capacity.

Note: As mentioned in *section 2.4.4*, the report will be issued first as a draft for the Village's review, after which a final version will be issued.

2.6 Value-Added Services

2.6.1 Our Risk Management Approach

Our team will employ a three-step risk management approach that involves identifying, quantifying, and responding to potential conflicts and/or anticipated problems that can negatively influence the outcome of the project.

Our team will work with the Village of Cremona Project Team and Contractors to identify and list all potential conflicts or problems (i.e., risks) that may impact the project scope and deliverables, starting from those listed in **Table 2**. Risks and potential conflicts will be discussed at the project startup meeting. Once identified, risks are classified and grouped by source and assessed in terms of probability of occurrence and severity of the outcome. Impacts are typically measured in terms of how they affect cost, schedule, or quality, as well as the planning and implementation strategy for the project. We will work with your team to develop effective risk management and control strategies to mitigate risk exposure. This involves conducting a project risk analysis to:

- Identify and quantify risk exposure
- Develop risk mitigation strategies, i.e., risk avoidance, risk reduction, risk assumption, risk transfer
- Establish a Risk Management Plan (RMP)
- Develop procedures for implementing and maintaining the RMP
- Add staff without compromising our current resource capacities to meet or accelerate timelines as required.

2.6.2 Our QAQC Procedures and Cost Control Plan

Our Project Manager will work directly with the Project Technical Lead on all management activities and provide accountabilities for all our activities, deliverables, and performance in meeting this project's goals. In summary, the PM will.

- Coordinate safety requirements with the staff following applicable safety regulations and the Village's and Avodahtec's HSE procedures
- Develop a communication plan and stakeholder engagement plan
- Develop a work breakdown structure and project control schedule for the project phases
- Manage scope and budget for the project through cost control and a reporting system
- Communicate project status updates regularly via progress meetings
- Prepare invoicing and fee status reports
- Maintain a risk register and needs and action items list
- Oversee the quality assurance and quality control, and maintain project records.
- Ensure the project team adheres to the Village's and our team's quality management practices.

We will employ a strict peer-review QA program that begins at project commencement and continues throughout the life cycle of a project. Our QA program is designed to reduce the potential for errors while providing a systematic review of all facets of a project. This formalized project management and review system results in consistent, high-quality project deliverables.

3.0 AVODAHTEC QUALIFICATIONS, EXPERIENCE, AND REFERENCES

3.1 About Avodahtec

QUALITY SERVICES

Our unwavering commitment to quality stems from aligning with our core values and consistently applying best-in-class quality practices and principles across all our projects.

Avodahtec is a specialized engineering and management consulting firm built on the founders' decades of experience. It is headquartered in Edmonton and operates across Canada. We are dedicated to delivering tailored, value-oriented technical, engineering, and management solutions. Our expertise lies in civil engineering, asset and infrastructure management, project and construction management, training, instructional design, and health, safety, and the environment. In addition to our full-time staff members, our operational strategy includes drawing upon the knowledge of highly qualified engineers, designers, scientists, technicians, academics, and specialist firms who collectively have decades of experience as independent consultants. Avodahtec's professional services are meticulously tailored to balance our clients' expectations, risks, and cost considerations. We believe this approach will yield precise and efficient project deliverables, contributing to developing resilient and sustainable communities worldwide.

Our core mission is to help communities and organizations build sustainable infrastructure through effective, efficient, streamlined, and value-centric engineering and management solutions. We understand and value the need for the current generation to leave the world a better place to live for future generations, and that is why, at Avodahtec, sustainability is at the center of all we do. We are committed to supporting our clients on their sustainability journey, with one project at a time.

SUSTAINABILITY: We proactively implement measures for environmental conservation and energy efficiency in all our activities and projects, constantly aiming for enhancement.

Avodahtec holds the necessary insurance coverage to meet all minimum requirements outlined in the RFP. We can provide a Certificate of Insurance to confirm the required coverage prior to the commencement of work, and we will ensure that the coverage is maintained throughout the duration of the contract.

INNOVATING LOCALLY, IMPACTING GLOBALLY… While we are locally based, our founding team has led, delivered, and supported multiple infrastructure projects across Canada, the United States, Mexico, the United Kingdom, and beyond. We have supported asset owners across these nations to narrow their 'infrastructure gap' by enabling a 'just-in-time' investment strategy through best-in-class asset management practices.

3.2 Experience and Client References

Avodahtec is a dynamic, emerging firm with a strong foundation in the industry. Project examples provided below are divided into two groups – Group #1 lists Avodahtec's direct projects, while Group #2 presents projects that were successfully led and delivered by our Managing Principal, **Dr. Olugbenga Ibikunle**, during his tenure at Stantec. For Group #2, client project managers from these projects can provide personal references and insights into Dr. Ibikunle's performance.

Overall, our team for the current RFP brings decades of combined industry experience and is well-equipped to meet and exceed the Village's expectations on this project.

3.2.1 Group #1 Project Experience

Project Example No. 1

Project Name: Asset Management Services: Town of Stony Plain Utilities Strategic Asset Management Plan (SAMP) Development
Owner: The Town of Stony Plain, Alberta

Project Overview: Upon engagement by the Town, Avodahtec initiated the project by reviewing the Town's existing asset management practices in alignment with current industry best practices and applicable guidelines and standards. The primary aim was to identify gaps and provide recommendations for the pathway forward. The ultimate goal was to establish a comprehensive Asset Management System (AMS).

Project Objectives: To achieve this long-term goal, Avodahtec developed an updated Asset Management Policy and Philosophy document, which served as a guiding framework for the development of other key AMS components. With these foundational documents in place, the project progressed to the next phase: assessing the Town's 'Current Situation' guided by ISO 55000 and other relevant industry guidelines. This assessment was crucial for the subsequent phase, which is the development of the Town's Strategic Asset Management Plan (SAMP).

Approach and Methodology: Avodahtec adopted a structured approach, leveraging industry best practices and guidelines from ISO 55000, the Institute of Asset Management (IAM) SSG, IPWEA, and the International Infrastructure Management Manual (IIMM). The approach included:

1. **Guidelines and Standards:** Following the guidelines of ISO 55000, IAM SSG, IPWEA, and IIMM.
2. **Strategic Analysis:** Engaging the best industry strategy development guidelines to complete:
    - SWOT Analysis
    - PESTLE Analysis
    - Current and Future Demand Analysis
    - Analysis of macro trends in political, regulatory, economic, climate, demographic, social, and other influences.
3. **Internal Context Analysis:** Focusing on two key areas:
    - **The Asset:** Evaluating the assets owned by the Town and their current state.
    - **Resources and Capabilities:** Assessing the Town's current resources and capabilities in asset management, identifying what the Town can or cannot do.

Key Deliverables:

1. **Asset Management Policy:** Developed an updated policy and philosophy document to guide AMS development.
2. **Current Situation Assessment:** Conducted a thorough assessment of the Town's current asset management practices and framework.
3. **Strategic Asset Management Plan (SAMP):** Developed key components of the required comprehensive SAMP to outline strategic goals and actions for asset management.

Outcome: The project provided the Town with a clear, actionable roadmap to enhance its asset management practices. The updated policy and philosophy document, along with the SAMP, empowered the Town to make informed decisions, secure stakeholder support, and ensure its assets were managed efficiently and effectively. This initiative ultimately drove growth and delivered optimum value for the Town's residents while meeting organizational objectives.

Contact: Fernando Sacluti, P. Eng., Utility Project Manager / **Phone**: Tel: 587 338-3501 / **Email**: fsacluti@stonyplain.com
Project Year: Oct 2024 – Jan. 2025 / **Project Value**: $25,000.00

Project Example No. 2

Project Name: Asset Management System Roadmap for Nisku and DeForest Plants
Owner: Little Potatoes Company Ltd. (LPC), Edmonton, AB, Canada

Project Overview: Avodahtec has been engaged by LPC to provide professional services to optimize and improve the design of LPC's second wash line system and develop an Asset Management System (AMS) Roadmap for their asset portfolios at the Nisku (Canada) and DeForest (US) plants. The latter initiative is driven by LPC's commitment to operational excellence and the need to bridge the gap between their asset management policy and its practical implementation.

Project Objectives: The primary objective is to create a comprehensive roadmap that LPC can follow to establish a fit-for-purpose AMS. This roadmap aims to provide clear, data-driven justifications for necessary infrastructure investments, outline the current asset state, projected costs, and long-term benefits of proactive maintenance and upgrades. Additionally, it serves as a key communication tool to engage stakeholders and build confidence in LPC's ability to manage infrastructure efficiently and responsibly.
Project Scope: The project involves the development of an AMS Roadmap for LPC's asset portfolios, which include 159 parent assets and 1,122 child assets at the Nisku plant, and 261 parent assets and 1,081 child assets at the DeForest plant. The total asset inventory comprises 420 parent assets and 2,203 child assets.

Approach and Methodology: Avodahtec adopts a structured, phased approach consistent with industry best practices, leveraging guidelines and recommendations from ISO 55000:2014, the Institute of Asset Management (IAM) Handbook, the International Infrastructure Management Manual (IIMM), and other relevant frameworks. The approach ensures a comprehensive, manageable, and achievable roadmap with clear timeframes. For each activity or task, Avodahtec provides the following elements at a high level:

- Minimum industry best practice requirements
- Level of effort
- Industry best practice sequence of activities
- Impact and criticality
- Priority classification
- Potential timeframe to complete

To ensure clear ownership and streamline communication, Avodahtec utilizes the RACI Model (Responsible, Accountable, Consulted, Informed). This model helps reduce the risk of missed deliverables and facilitates better collaboration among stakeholders.

Key Deliverables:

1. Asset Management Goals: Define clear asset management goals aligned with LPC's organizational objectives.
2. System Training: Develop and implement a comprehensive training program for system users.
3. Risk Assessment: Conduct a thorough risk assessment following ISO 31000 guidelines to identify and mitigate potential risks.
4. Lifecycle Management: Establish cost-effective management strategies for a 15-year financial cycle, considering all lifecycle stages and interrelationships.
5. Renewal Investment Plan: Create a renewal investment plan that considers current replacement/repair costs and LPC's yearly budget.

Outcome: The AMS Roadmap provides LPC with a clear, actionable plan to enhance its asset management practices. It empowers the management team to make informed decisions, secure stakeholder support, and ensure that LPC's asset portfolios meet current and future needs. The roadmap ultimately drives growth and delivers optimum value for LPC's customers while meeting the company's objectives.

Contact: Frank Santago, Operations Director / **Phone**: 780 909-1824 / **Email**: frank@littlepotatoes.com
Project Year: 2024- Ongoing / **Project Value**: $65,280.00 (for Asset Management Services)

3.2.2 Group #2 Project Experience

Project Example No. 3

Project Name: E.L. Smith and Rossdale Water Treatment Plants -Asset Management Plans (AMPs)
Owner: EPCOR Water, Edmonton AB

Project Overview: The project involved the development of Asset Management Plans (AMP) for two WTP Phosphoric Injection Systems, comprising 213 preselected individual assets, including building components. The AMP was completed in line with EPCOR's Asset Management Policy and guidelines from ISO 55000 and the International Infrastructure Management Manual (IIMM). The AMPs detailed the information about the assets and outlined actions required to provide an agreed level of service in the most cost-effective manner for present and future service requirements, while addressing associated risks. The project team was led by **Dr. Ibikunle.**

Risk Assessment: The risk assessment component of the AMP followed the guidelines of ISO 31000 and other applicable industry standards. This included criticality analysis to determine the risk level of each asset under consideration and establish the Business Risk Exposure (BRE) to EPCOR, along with corresponding risk mitigation measures in case any of the assets were to fail. To compute the BRE, we evaluated the probability of failure for each asset, which included:

Review of Current Asset Service Lives: Leveraging industry-specific benchmark data and, where necessary, recommending changes to asset service lives by asset class, providing full explanations of the rationales for each change.
Assessment of Estimated Future Retirements: Conducting a thorough assessment of estimated future retirements, supported by benchmarking data from comparable water utilities across Canada and the United States.

Key Elements:

1. **Defined Levels of Service**: Documented the defined levels of service for each asset under consideration.
2. **Growth Impact Management:** Established methods for managing the impact of growth through demand management and infrastructure investment.
3. **Lifecycle Approach**: Considered a lifecycle approach in developing cost-effective management strategies for the 15-year financial cycle that meet the defined level of service for each asset.

Renewal Investment Plan: A renewal investment plan was established as part of the AMP, considering all assets' current replacement/repair costs and EPCOR's yearly budget.

Contact: Ayan Abdille, P.Eng., PMP, / **Phone**: 780.412.3227
Project Year: 2023 / **Project Value**: $149,000

Project Example No. 4

Project Name: Utility Stations Facilities and Asset Audit and Forcemain Condition Assessment: Asset Management, Capital Investment, and Implementation Plan
Owner: City of Whitehorse (Engineering Services)

Project Overview: The scope of the project included the inspection of 64 utility stations and their individual assets, non-destructive testing of forcemains and watermains, condition assessment of infrastructures within the City's utility stations, and the development of an asset management strategy and a 10–20-year capital investment plan (CIP) for managing the aging asset systems and/or individual assets under consideration. The aim of these inspections was for the City to understand the condition of critical assets to make informed decisions about capital planning and to better schedule and coordinate infrastructure improvements and rehabilitations, thereby reducing the number of costly emergency repairs. This project also contributed to the City-Wide Water and Sewer Study and informed the City's master planning and asset management for the City's water and sewer infrastructure over the next 20 years.

Approach and Methodology:
The project team was led by Dr. Ibikunle. Following the requirements and guidelines of all applicable best-in-class industry standards, such as ISO 55000 and the International Infrastructure Management Manual (IIMM), a condition grading system was developed to prioritize assets for renewals and provide baselines for future condition assessments.

1. Inspection and Testing: Conducted inspections of 64 utility stations and their individual assets, along with non-destructive testing of forcemains and watermains.
2. Condition Assessment: Assessed the condition of infrastructures within the City's utility stations.
3. Asset Management Strategy: Developed an asset management strategy and a 10–20-year capital investment plan (CIP) for managing aging asset systems.
4. Condition Grading System: Developed a condition grading system to prioritize assets for renewals and provide baselines for future condition assessments. These were summarized in an in-house developed asset register tool that captured: (i) Condition grading, (ii) Age of assets, (iii) Consequence of failure scores, (iv) Business risk exposure scores (BRE), and (v) Renewal costs of assets

Risk Assessment: To compute the BRE, we evaluated the probability of failure for each asset, which included:

- Review of Current Asset Service Lives: Leveraging industry-specific benchmark data across Canada and, where necessary, recommending changes to asset service lives by asset class, providing full explanations of the rationales for each change.
- Assessment of Estimated Future Retirements: Conducting a thorough assessment of estimated future retirements using fit-for-purpose depreciation methods, supported by all necessary analyses.

Key Elements:

1. BRE Score and Renewal Cost: The BRE score and renewal cost were used to develop a capital investment and implementation plan that considered social, economic, health and safety, environmental impact, and risk of failure criteria for the renewal time of assets.
2. Maintenance Plan: Developed a maintenance plan to address 'Inspection' and 'Maintenance' activities and Capital Expenditures (CAPEX) for rehabilitation and maintenance activities.

Outcome: The project provided the City with a comprehensive understanding of the condition of critical assets, enabling informed decisions about capital planning and better scheduling and coordination of infrastructure improvements and rehabilitations. This initiative ultimately reduced the number of costly emergency repairs and contributed to the City's master planning and asset management for water and sewer infrastructure over the next 20 years.

Contact: Gareth Earl, P.Eng. Infrastructure Manager
Phone: 867 689 1548 / **Email**:Gareth.Earl@whitehorse.ca
Project Year: 2021 – 2022 / **Project Value**: $254,000

Project Example No. 5

Project Name: City of Chilliwack Storm Drainage System Asset Management Plan & Stormwater Drainage Modelling
Owner: City of Chilliwack, BC

Project Overview: The project involved the development of a Drainage Model and completing a Storm Asset Evaluation for the City of Chilliwack's stormwater drainage system. The project's end goal was the development of a Storm Linear and Vertical Asset Management Plan. This was achieved by reviewing the City's existing storm drainage models, pump systems information, hydraulic modeling reports, flow monitoring and rainfall data, available archaeological, environmental, groundwater, and geotechnical reports, and the GIS database of storm sewers and culverts. The project identified gaps and made recommendations on how to close them, including the development of a Citywide CCTV Inspection Program, and developed a drainage model calibrated with the flow monitoring data.

Risk Assessment: To compute the Business Risk Exposure (BRE), we evaluated the probability of failure for each asset. This included:

- Review of Current Asset Service Lives: Leveraging industry-specific benchmark data and, where necessary, recommending changes to asset service lives by asset class, providing full explanations of the rationales for each change.
- Assessment of Estimated Future Retirements: Conducting a thorough assessment of estimated future retirements using fit-for-purpose depreciation methods, supported by all necessary analyses, including benchmarking data from comparable water utilities across Canada and the United States.

Key Elements:

1. Criticality Analysis and Pareto Rule: Leveraged outputs from the aforementioned tasks to develop an Asset Management Plan (AMP) for the most critical linear and vertical assets, identified based on criticality analysis and the Pareto rule.
2. Defined Levels of Service: Worked toward the most achievable trade-off between the City's level of service, cost, and risk exposure.
3. Strategic Capital Investment Plan: Developed a 10-year and 25-year strategic capital investment plan.
4. Lifecycle Action Plans: Created Asset Management Lifecycle Action Plans.
5. Financial Forecast and Funding Strategy: Established a Financial Forecast and Funding Strategy.
6. Improvement and Monitoring Activities: Outlined AM Improvement and Monitoring Activities.

Approach and Methodology: The framework for developing the Asset Management Plan followed the ISO 55000 standard, International Infrastructure Management Manual (IIMM) guidelines, and the City of Chilliwack's asset management policy and strategy documents. The project included stormwater drainage modeling, completed by importing the City of Chilliwack's existing stormwater models into PCSWMM to build an integrated stormwater model.

Outcome: The project provided the City of Chilliwack with a comprehensive understanding of their storm water drainage system, enabling informed decisions about capital planning and better scheduling and coordination of infrastructure improvements and rehabilitations. This initiative ultimately reduced the number of costly emergency repairs and contributed to the City's master planning and asset management for stormwater infrastructure over the next 20 years.

Contact: Kristian Biela, EIT, Project Manager
Phone: 604-792-9311 / **Email:** biela@chilliwack.com;
Project Year: 2023 – 2024 / **Project Value**: $202,000

3.3 Key Staff and Qualifications

3.3.1 Project Team Chart

Avodahtec believes in building relationships with clients based on trust, respect, and integrity of information. Our team will work for and with the Village to collaboratively provide value-driven services to meet the goals and objectives of the RFP. Our team's collective project knowledge and multidisciplinary experience are the strengths we bring to this project.

SAFETY & ENVIRONMENT: Our unwavering commitment lies in delivering professional services sustainably, prioritizing the prevention of injuries, accidents, occupational diseases, and environmental harm.

We understand the Village's objectives for the proposed project. Avodahtec has, therefore, assembled a team of subject matter experts (SMEs) and licensed professionals in good standing to provide the resources necessary to deliver the objectives of this RFP. The proposed team has been carefully selected based on their relevant experience, qualifications, and availability, and will be committed to your project throughout its duration. The organization of our project team is shown below in **Figure 1.**

Note: We understand that the Village expects this project to be completed in 5 months, with the expected start date of July 23rd. With this understanding, we have put together a large team of experienced professionals to make this happen.

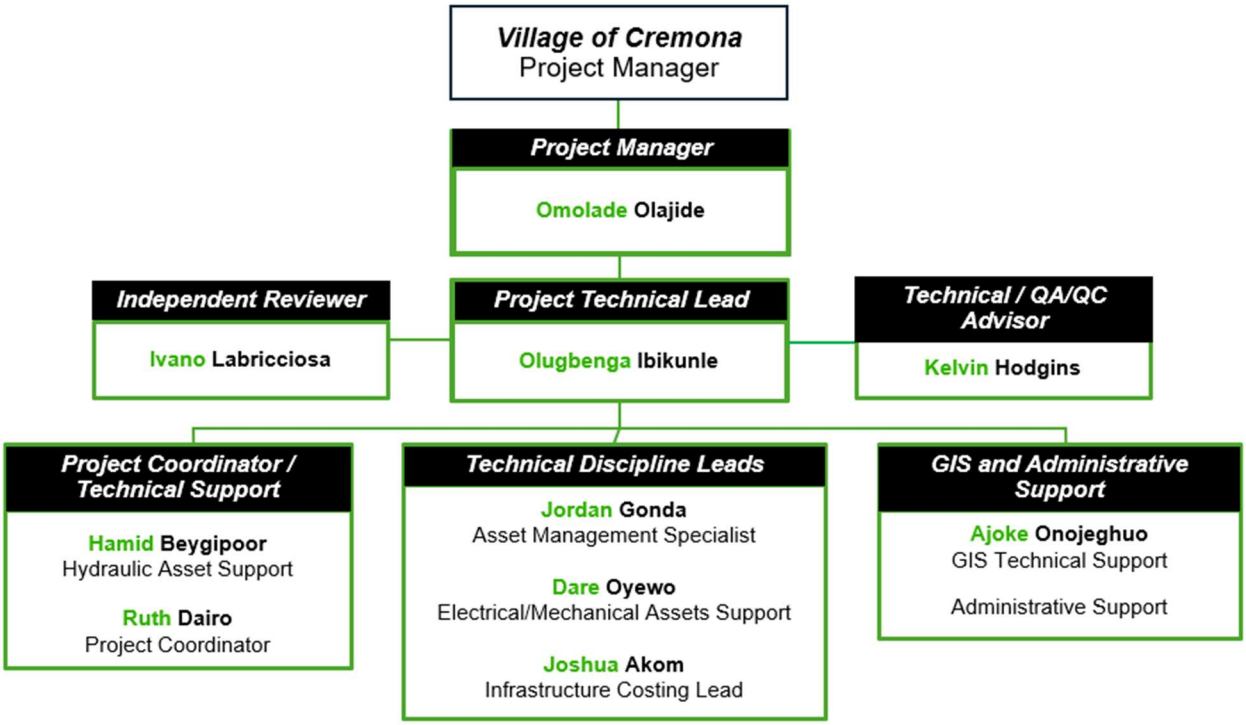


Figure 1: Project Team Organization Chart

3.3.2 Key Personnel Qualifications and Experience

In this section, we provided a short bio for each team member showing their relevant experience and qualifications.

Kelvin Hodgins, FEC, FCSSE, P.Eng., MCSCE, API653

Technical Advisor / QAQC Reviewer

Years of Experience: 38

Area of Service: Kevin has over 38 years of experience in water and wastewater infrastructure projects, especially in the cold region of Canada. He has led and delivered numerous water and wastewater infrastructure projects involving the design, inspection, condition assessment, engineering, and construction of conveyance systems. Kevin has participated in the leadership of teams providing major infrastructure project delivery utilizing a variety of procurement and contract models, including P3, Design-Build, Design-Bid-Build, and Construction Management. He will leverage his wealth of experience and leadership to provide technical and QAQC advisory on this project

EDUCATION

- B.Sc. Civil Engineering, University of Saskatchewan, Saskatoon, 1988.
- Certificate, Asset Management for Engineers - Infrastructure Resilience Professional (IRP) -Engineers Canada, Ottawa, ON, 2018
- Project Management Boot Camp, PSMJ Resources Inc.,

AWARD WINNER

- National Chairman, Cold Regions Engineering Division (2001/2004).
- CSCE, Canadian Society for Civil Engineering
- Member of CSCE (Since 1988), Canadian Society for Civil Engineering
- Member of APEY. (Since 2000), Engineers Yukon
- Member of CENT, Association of Consulting Engineering Companies - Northwest Territories

Kevin's leadership in both the public and private sectors, paired with his hands-on experience in procurement and contract models such as P3, Design-Build, and Design-Bid-Build, uniquely positions him to manage the multifaceted requirements of the Trunk Sewer Program. He has successfully led teams to execute large-scale infrastructure projects in various communities, especially in cold regions, ensuring high-quality, safety, and environmental sustainability standards. His experience includes overseeing inspections and assessments for a wide range of municipal and industrial assets, making him well-equipped to ensure the successful delivery of condition assessments, rehabilitation recommendations, and prioritization for the sewer network. Recognized for his leadership, Kevin has held key roles with organizations such as NAPEG and Engineers Canada and was named the NWT Chamber of Commerce's Businessperson of the Year in 2015. His deep understanding of northern infrastructure challenges and his commitment to community development will ensure the successful delivery of this critical program. In addition to his technical expertise, Kevin is passionate about fostering a professional workforce in Whitehorse, Yellowknife, and Iqaluit, ensuring that the wealth generated through projects is reinvested in local communities. His reputation for delivering high-quality professional services, coupled with his extensive network in the northern industry, indigenous governments, and development corporations, will be invaluable in supporting the success of this long-term program. Kevin's involvement in the Trunk Sewer Inspection and Assessment Program will ensure the delivery of a robust, high-quality program with a strong emphasis on safety, sustainability, and community engagement, reinforcing the Region's infrastructure priorities for the next five years.

Relevant Project Experience:

- Primary author of seed document for developing Canadian Standards Association (CSA) Group Technical Specification for TS 006 Water and Wastewater Distribution Systems in Northern Regions.
- Sewer Main Replacement Program | Bechoko, Northwest Territories •
- Charter Community of Déline - Sewage Lagoon Relocation, Design, Tender and Construction Services Déline, Northwest Territories
- Department of National Defence – CFS Alert Wastewater Treatment Project CFS Alert, Nunavut
- Ogilvie Street Drainage Basin Storm Water Improvements | Whitehorse, Yukon | Project Manager • Water Treatment Plant & Lake Intake | Baker Lake, Nunavut | Project Manager
- New 3,500 cu. m. Insulated Above Ground Water Storage Tank and Associated Treatment and Controls Systems | Grise Fiord, Nunavut | 2000 | Project Manager
- Water Resupply Line | Gjoa Haven, Nunavut Truck Fill Stations – Snap Lake, Kimmiru Rae Lakes, Paulatuk | Northwest Territories
- Piped Water & Sewer Study in Various Northwest Territories
- Village of Ft Simpson 2020 Water / Sewer Program Fort Simpson, NT, Canada
- Sewer Main Replacement Program | Bechoko, Northwest Territories
- Wastewater Treatment System Upgrades Iqaluit, Nunavut
- Village of Fort Simpson - New Mechanical Wastewater Treatment Plant, Design, Tender, Construction Services Fort Simpson, Northwest Territories
- Kimmirut Wastewater Feasibility Study, Predesign Services Kimmirut, Nunavut

Olugbenga Ibikunle, Ph.D., P.Eng., CRL, MBA, NASSCO PACP/MACP/LACP Certified

Project Technical Lead

Years of Experience: 18

Role and Level of Involvement: Dr. Ibikunle is an expert in water and wastewater conveyance system inspection, condition assessment, design, and engineering, as well as in water and wastewater asset and infrastructure management. He is also an experienced PM with experience in water infrastructure projects. With these skills, he will lead and oversee the delivery of this project's requirements.

EDUCATION

- Master of Business Administration (MBA) – Strategy & Consulting, Alberta School of Business, University of Alberta, Edmonton.
- PhD, Civil Engineering, Heriot-Watt University, Scotland, United Kingdom.
- M.Sc., Environmental Engineering & Project Management, University of Leeds, England, UK.
- BSc. (Hons.), Process Engineering, Obafemi Awolowo University, Nigeria.

AWARD WINNER

- IAM 2020 NxtGen Global Award
- 2021 Canadian Network of Asset Managers (CNAM) TEREO National Asset Management Ambassador award
- North America Water Project of the Year 2022

Dr. Olugbenga Ibikunle has 17 years of experience, which includes water and wastewater conveyance systems design and construction, project management and design management, trenchless and tunneling practices, development and application of new condition assessment methodologies, unique management solutions for civil infrastructure (pressure pipes, large-diameter gravity sewers, and other hydraulic structures), as well as asset management practices.

Depending on the project and team requirements, Olugbenga has acted as project technical lead, asset management lead, project manager, and senior project engineer on several successful municipal water/wastewater infrastructure projects throughout Canada and North America. With excellent negotiating skills, he has been part of successful discussions with major stakeholders, such as regulatory bodies, railway line owners, utility owners, landowners, public members, etc., for multiple projects to obtain permits and buy-ins for difficult /complex liner infrastructure construction projects.

His recent integrated framework for the condition assessment and rehabilitation of municipal assets and a novel 'Asset Condition Assessment, Rehabilitation, and Costing Tool' have been used across North America to provide support systems to municipalities and clients in prioritizing repair and replacement projects, avoiding costly and disruptive emergency repairs, and narrowing the 'infrastructure gap' by enabling a 'just-in-time' investment strategy. He co-authored the recently published WRF #4717, a $0.6M research project publication, titled "Innovative Technologies to Effectively Manage Deteriorating Infrastructure". With over 50 participants globally, this work guides linear asset owners on asset condition assessment technology implementation and operation. The work also identifies and maps emerging technologies that provide the potential for more effective solutions for inspecting, monitoring, and overall management of aging conveyance systems.

Relevant Project Experience:

- Asset Management Services: Town of Stony Plain Utilities Strategic Asset Management Plan (SAMP) Development (Asset Management Lead) – Oct. 2024- Ongoing
- EPCOR, E.L. Smith and Rossdale WTPs Phosphoric Injection Systems-Asset Management Plans, Edmonton, Alberta (Asset Management Lead) – 2021-2023
- Peer Review of Asset Management Risk Assessment for Wastewater Collection System and Water Distribution System, City of Austin, Texas (Asset Mgt. Specialist, 2020-2021)
- Water Research Foundation (Project 4717)- Innovative Technologies to Effectively Manage Deteriorating Infrastructure, US (Co-Investigator, 2020)
- The Rocky River Stormwater Master Plan Project, Cleveland, Ohio, US (Pipeline/Assets Assessment Lead, 2018-2020)
- Water and Wastewater Collection Systems Management Planning | Pinellas County Utilities (PCU) | Florida, United States | 2023 | Asset Management/Pipeline Specialist
- Region of Peel CCTV Inspection and Condition Assessment of Storm Sewers | Region of Peel | Brampton, Ontario | 2023 | Project Technical Lead
- Little Etobicoke Creek Sanitary Trunk Sewer Condition Assessment and Rehabilitation | Region of Peel, Ontario | 2022| Project Technical Lead
- Region of Peel Year 2 Quarterly Sewer and Manhole Condition Assessment: East Brampton Sanitary Sewer Trunk | Brampton, Ontario | 2022 | Project Technical Lead
- Lauderdale Trunk Sewer Inspection, Condition Assessment and Rehabilitation Project | EPCOR | Edmonton, Alberta | 2018-2020 | Project Engineer
- University of Alberta Inspection, Condition Assessment, and Trenchless Rehabilitation of Submerged Twin Raw Water Intake Pipeline, Alberta (Project Manager / Project Technical Lead)
- Inspection, Condition Assessment, and Rehabilitation of 99 Avenue A-Shaped Sanitary Trunk (151 Street to Mackinnon Ravine) | EPCOR Drainage Operations | Edmonton, Alberta | Project Technical Lead
- Mill Creek Combined (Area S-2a) Trunk Sewer Inspection, Condition and Rehabilitation Assessment | EPCOR Drainage Services | Edmonton, Alberta | 2017 2020 | Project Engineer

	• P-15-120 York CCTV Inspection and Assessment of Storm Sewers – Rehabilitation Recommendations | The Regional Municipality of York | Toronto, Ontario | 2018 | Civil Engineer • City of Whitehorse Sanitary Forcemains Inspection and Condition Assessment (Technical Lead)

Omolade Olajide, PMP, PMI-ACP, ITIL, MSc., MBA.

Project Manager

Years of Experience: 17
Area of Service: Omolade is a senior project manager with a proven track record of successfully managing and implementing large-scale and complex infrastructure projects in public and private industries. She will lead and deliver the project management requirements of this project.

EDUCATION

- M.Sc., Project Management, Walden University, Minneapolis, United States. 2020
- Diploma in Human Resources, Ashton College, Vancouver, British Columbia. 2020
- M.Sc., Business Administration, Kaduna State University, Nigeria. 2017
- MBA, Business Administration, Ahmadu Bello University, Nigeria. 2012.

MEMBERSHIP

- Member, Project Management Institute, United States of America, 2020-Present
- Inducted Member, National Society of Leadership and Success (NSLS), United States of America, 2020 -
- Member, Delta Mu Delta (International Honour Society in Business), United States of America, 2018-Present

Omolade is a highly accomplished and result-driven Senior Project Manager with 17+ years of experience successfully leading and implementing large-scale and complex multi-million-dollar infrastructure projects across diverse sectors, including public sector infrastructure initiatives. Demonstrated expertise in managing all aspects of an infrastructure project lifecycle, from planning and project closure, while tailoring approaches (Agile, Scrum, Waterfall, and Hybrid project management methodologies) to meet the unique needs of each project.
Her expertise in stakeholder management, including building consensus, managing expectations, and facilitating effective communication, has been instrumental in navigating the complexities of a collaborative project involving various stakeholders (Government Agencies, Contractors, the Public). Omolade leads and motivates the team to build consensus, foster collaboration, and effectively manage resources to achieve project objectives and goals.

Omolade possesses a strong understanding of risk management principles, and she proactively identifies, analyzes, and mitigates potential risks in complex project environments, ensuring minimal disruption to project timelines and budgets. She efficiently manages project budgets, tracks expenditures, and prepares financial reports, ensuring strict financial guidelines, contracts, and agreements are followed.
Omolade has extensive experience negotiating, administering, and overseeing contracts with vendors and contractors, ensuring compliance and mitigating risk. She is familiar with environmental regulations, water resource management, and relevant legal frameworks to ensure project compliance.
Above all, she consistently delivers projects on time, within scope, and within budget, exceeding stakeholder expectations. She is currently being certified as a Program Manager (PgMP) with the Project Management Institute (PMI).

Relevant Project Experience:

- Edmonton Fire Rescue Services (EFRS) Next Generation 9-1-1 (NG9-1-1) Infrastructure and System Readiness and Transition Project (Phase 2) (Project Manager)
- Network Macro Segmentation, Including Data Centers Upgrades Project (Project Manager)
- City of Edmonton Enterprise Identity Access Management (EIAM) Project (Project Manager)
- Multi-Factor Authentication (MFA) Rollout to the City of Edmonton (Project Manager)
- City of Edmonton Private Utility Right of Way Automation Project (Project Manager)
- Upgrade of City of Edmonton Transit System (ETS) Trip Planner Project (Project Manager)

Jordan Gonda, MSc., P.Eng.

Asset Management Specialist

Years of Experience: 10
Area of Service: Jordan is an experienced senior asset management professional who has helped over 50 municipalities across Canada advance their asset management programs. With his experience, he will work with the Technical Lead to deliver the Region's project requirements.

Jordan Gonda is a Canadian asset management specialist, having worked with over 50 municipalities across Canada to advance their asset management programs. Leveraging his 9 years of experience, Jordan has extensive experience in strategic asset management and capital planning. Jordan has helped organizations develop asset management programs through Strategies, Roadmaps, and key asset management frameworks, including staffing rationalization. He has also worked with large government organizations to develop capital investment planning tools.

EDUCATION

- M.Sc., Civil Engineering, University of Saskatchewan, SK, Canada, 2015
- B.Sc., Civil Engineering, University of Saskatchewan, SK, Canada, 2013

He has developed asset management plans for Aurora, the Town of East Gwillimbury, and the City of Regina, among others. These plans focus on staffing impacts of changing levels of service, addressing climate impacts on levels of service delivery, and establishing targets for levels of service. Jordan has worked with the Town of Erin to develop a resident engagement survey to assess resident priorities on infrastructure investments.

Most recently, Jordan has worked with the Niagara Region to develop the Water and Wastewater Division's first long-range capital investment planning tool. This uses a statistical probability of failure model, a triple bottom line consequence of failure, and links a return on investment prioritization scheme to a financial planning model. This work effectively prioritizes $ 2 billion of investments over a 10-year horizon.

Jordan has a background in Civil Engineering, focusing on decision support and systems modeling. He has a master's degree in civil engineering from the University of Saskatchewan, researching the trade-offs of water allocation within Southern Alberta

Relevant Project Experience:

- Town of Erin Levels of Service and Community Engagement (Senior Advisor)
- Town of East Gwillimbury 2021 Asset Management Plan (Technical and Project Lead)
- Town of Aurora 2025 Asset Management Plan (Technical Lead)
- City of Regina Water and Wastewater Asset Management Plan (Technical Lead)
- Simcoe County Asset Management Strategy (Senior Advisor)
- Amherstburg Asset Management Strategy and Asset Management Program Development (Technical and Project Lead)

Joshua Akom, P.Eng., MBA, M.Sc., PMP, PQS.

Infrastructure Costing Specialist

Years of Experience: 8

Role and Level of Involvement: Joshua is an experienced project engineer with deep expertise in infrastructure advisory. With these skills, he will support delivering the project's technical and project management requirements.

EDUCATION

- Master of Business Administration, University of Alberta Business School, Edmonton, AB, Canada, 2023
- M.Sc., Civil Engineering, Construction Engineering and Management Specialty, University of Manitoba, Winnipeg, MB, Canada, 2019

Joshua is a construction professional with several years of work experience in project management and capital project excellence, as evidenced by working on multiple projects amounting to several million dollars. Joshua advises municipalities on capital infrastructure investment. His experience spans across the different cycles of capital projects – front-end planning to construction and post-construction. His recent projects have focused primarily on front-end planning, providing cutting-edge solutions to clients regarding project setup for excellent project execution and success. Joshua understands the complexity and the necessity of proper planning and procedures in ensuring successful project delivery.

Relevant Project Experience:

- EPCOR, E.L Smith and Rossdale Water Treatment Plants Flood Mitigation, Edmonton, Alberta (Infrastructure Cost Advisor)
- EPCOR, E.L Smith and Rossdale Water Treatment Plant Upgrades, Edmonton, Alberta (Infrastructure Cost Advisor)
- Keeyask Electric Hydro Dam, Gillam, MB (Contracts Engineer)
- City of Saskatoon, Water Treatment Plant, Saskatoon, SK (Infrastructure Cost Advisor and Project Lead)
- City of Calgary, Bonnybrook Wastewater Treatment Plant, Calgary, AB (Senior Consultant – Estimating)

REGISTRATIONS

- Project Management Professional (PMP) #License 2117498, Project Management Institute
- Professional Engineer #44346, Engineers and Geoscientists Manitoba, 2023
- Professional Engineer #313947, APEGA, 2024
- Professional Quantity Surveyor (PQS) #254588, Canadian Institute of Quantity Surveyors, 2020

Ivano Labricciosa, MEng, P.Eng., MBA.

Independent Reviewer

Years of Experience: 30+

Area of Service: Ivano Labricciosa is a seasoned utility industry executive with over three decades of experience specializing in utility asset management, strategic planning, and entrepreneurial leadership. He will oversee the QAQC requirements of the project and act as Technical Advisor.

EDUCATION

- C.Dir. Chartered Director, McMaster University, Hamilton, ON, Canada
- M.Eng.Sc., Electrical Engineering, University of Toronto, Toronto, ON.
- MBA, Business Administration, Queens University, Kingston, ON.

AWARD WINNER

- Ontario Energy Board Approval Leader for Toronto Hydro's largest-ever Capital Investment Program

Strategic leadership for award-winning Smart Grid and clean energy investments

Ivano Labricciosa is a proven executive leader with utility industry experience spanning over 30 years. Ivano leverages his industry knowledge, leadership skills and change management experiences to effect sustained business performance improvement throughout the organization.

In his latest assignment as the President and CEO of Oshawa Power and Utilities Corporation (Oshawa Power), he was instrumental in supporting the energy and communication service needs of Oshawa, Durham Region, and parts of the GTA. As CEO of Oshawa Power, Ivano played a pivotal role in the overall strategic planning of the company and its subsidiaries involved in energy distribution, energy generation, and telecom ventures. His background in engineering, business development, and strategic planning, combined with his international experience with alternative and renewable energy, brings innovative leadership to not only Oshawa Power but to Ontario's energy sector. Ivano has also held successful executive roles at Toronto Hydro as the Vice President of Asset Management and the Executive Vice President of Business Development. In Asset Management, he secured Ontario Energy Board approvals for the largest Capital Investment program in the corporation's history.

In Business Development, he was a key proponent of smart grid and clean energy investment and the successful divestiture of its unregulated Telecom and other energy asset businesses, enabling financial support for the major regulated investments.
Ivano holds a Bachelor of Engineering Science degree from Western University, a Master of Engineering degree from the University of Toronto, and a Master of Business Administration from Queen's University. He is also a graduate of the Directors College at McMaster University DeGroote School of Business.

Relevant Project Experience:

- Strategic leadership in regulated utility operations and capital investment programs
- Business transformation and governance in energy generation and telecom sectors
- Advocacy for clean energy and smart grid innovation

Dare Oyewo, PMP, CMRP, LSS.B.B, P.Eng.

Electrical & Mechanical Asset Technical Support

Years of Experience: 20

Role and Level of Involvement: Dare is an expert in asset management, Process optimization, and strategic leadership. He has successfully managed capital projects of over $10 million, delivering on time and under budget while ensuring minimal disruption to operations. He will be acting as the independent reviewer of all the project deliverables

EDUCATION

- Master of Business Administration (MBA) – Current Student University of Fredericton
- Electrical Engineering – University of Alberta. 2022
- BSc., Computer Science – Olabisi Onabanjo University
- Advanced Diploma, Electrical Electronics Engineering - Equivalent to BSc. Electrical Engineering

CERTIFICATIONS & TRAINING

Dare is a highly skilled Engineering and Operations Leader with extensive experience in asset management, reliability engineering, and manufacturing operations. With a strong foundation in electrical engineering, electromechanical systems, and computer science, he specializes in optimizing processes, managing large-scale assets, and driving operational excellence. Certified in Lean Six Sigma Black Belt (LSSBB), ISO 9001 & 14001 standards, Certified Maintenance & Reliability Professional (CMRP) and Project Management Professional (PMP), Dare excels in implementing Total Preventive Maintenance (TPM) strategies, enhancing equipment performance, and achieving measurable cost savings.

He has successfully led capital projects exceeding $100 million, implementing reliability-centered maintenance (RCM) programs that reduced unplanned downtime by 30% and maintenance costs by 15%. Dare brings expertise in asset lifecycle management, aligning operations with sustainability initiatives and ISO 14001 environmental standards to optimize energy efficiency, reduce GHG emissions, and improve overall operational resilience. By leveraging CMMS systems and data-driven solutions, he delivers continuous improvements that enhance productivity, safety, and asset performance. Part of Dare's strategic approaches is integrating engineering expertise, Lean principles, and ISO standards to align organizational goals with industry best practices, delivering consistent operational efficiency, cost optimization, and sustainability results.

Relevant Project Experience:

<u>Capital Project Delivery:</u>

- Led the successful execution of $10 million+ capital improvement projects, delivering on time and under budget.

- Project Management Professional (PMP) PMI 2021
- Certified Maintenance & Reliability Professional - CMRP
- Certified Lean Six Sigma Black Belt (LSSBB)
- Certified Journeyman Electrician – IP Red Seal – AIT - 2016
- Total Preventative Maintenance (TPM) Training

- Upgraded energy systems, resulting in a 25% reduction in energy costs and significant progress toward GHG emission targets.

Asset Performance and Reliability:

- Implemented Reliability-Centered Maintenance (RCM) and Total Preventative Maintenance (TPM) strategies, reducing unplanned downtime by 30% and maintenance costs by 15%.
- Deployed Computerized Maintenance Management Systems (CMMS), improving asset visibility and scheduling efficiency.

Sustainability and ISO Compliance:

- Optimized operational processes to meet ISO 9001 (Quality Management) and ISO 14001 (Environmental Management) standards.
- Spearheaded sustainability initiatives, achieving 30% energy savings and aligning plant operations with ESG goals.

Operational Excellence and Continuous Improvement:

- Led Lean Six Sigma projects that identified and eliminated process inefficiencies, delivering $2 million+ in annual cost savings.
- Improved Overall Equipment Effectiveness (OEE) by 20% through process optimization and equipment performance enhancements.

Hamid Beygipoor, PhD., EIT

Hydraulic Assets Technical Support

Years of Experience: 20

Role and Level of Involvement: Dr. Beygipoor is an accomplished expert in civil and water resources engineering, with over two decades of experience spanning academia, research, and industry. With these skills, he will support the Project Technical Lead and Project Engineer in delivering the project's requirements.

EDUCATION

- Ph.D. in Hydraulic Structure, Islamic Azad University Science & Research Branch, Tehran (Khuzestan), Iran, Sep. 2013. (Ranked first)
- M.Sc. in Hydraulic Structure, Shahid Chamran University, Ahwaz, Iran, Sep. 2003. (Ranked first)
- B.Sc. in Irrigation and Drainage Engineering, Shiraz University, Shiraz, Iran, Feb. 1999. (Ranked second)

REGISTRATIONS

Engineer-in-Training (EIT) – APEGA, 2024

Dr. Gholamhossein Beygipoor is an accomplished civil and water resources engineering expert with over two decades of experience spanning academia, research, and industry. Renowned for his work in hydraulic structures, hydrology, and environmental engineering, Dr. Beygipoor has led significant projects across Iran and beyond, focusing on watershed management, stormwater systems, and pressurized irrigation design.

Dr. Beygipoor combines extensive research with practical applications, including groundbreaking work in sediment control, hydraulic modelling, and sustainable water management strategies. As a visiting professor at the University of Saskatchewan, he contributed to advancing hydraulic engineering education while continuing his research on hydraulic structures and numerical modelling.

A prolific author, Dr. Beygipoor has published numerous journal articles and conference papers on sediment transport, dam safety, and advanced irrigation systems, contributing to theoretical advancements and real-world solutions. His guidance as a supervisor has helped graduate students undertake impactful research in hydrology and water engineering.

Certified as an Engineer-in-Training (EIT) by APEGA and equipped with an extensive skill set in tools like AutoCAD, HEC-RAS, and Flow-3D, Dr. Beygipoor bridges the gap between innovative research and practical engineering. His commitment to excellence has earned him recognition as a leader in addressing the critical challenges of water resource sustainability and infrastructure resilience.

Relevant Project Experience:

- Designed and implemented pressurized irrigation systems in various fields and gardens, Shiraz, Iran, 2002-2009
- Renovated the Shiraz-City Storm Water System and managed Khosk-River, Shiraz, Fars, Iran, 2004-2009
- Designed stormwater system for Barf-Frooshan building project, Shiraz, Iran, 2007-2009
- Conducted study, survey, and design of "Ghalatooyeh Darab" Storm Water Project, Fars, Iran, 2007
- Managed the study, survey, and design of the "Hanfeghan Firoozabad" stormwater project, Firoozabad, Fars, Iran, 2008
- Led equipment design and renovation of "Sivand Dam," Fars, Iran, 2009
- Conducted watershed study and hydraulic structure design in various regions, including Tangeh-Kaleh, Sirmand, Bashagerd, and Hajiabad

Ruth Dairo, PMP., E.I.T., MSc., B.Eng.

Project Coordinator

Years of Experience: 6

Role and Level of Involvement: Ruth is a results-driven Civil EIT and a certified project management professional (PMP) who has been focusing on conveyance system design and engineering, asset management, infrastructure project management, and pipeline assessment. Ruth brings a strong foundation in civil engineering and project coordination to the project as she supports the project team in providing engineering expertise, managing inspection workflows, and ensuring alignment with project deliverables.

EDUCATION

- MSc, Civil and Environmental Engineering (Structures), University of Lagos, Nigeria, 2018
- Bachelor of Civil Engineering, Osun State University, Osogbo, Nigeria, 2015

CERTIFICATIONS & TRAINING

- Project Management Professional Certification (PMP) Project Management Institute (PMI), #8055825, 2023
- Engineer-In-Training #309830, Association of Professional Engineers and Geoscientists of Alberta (APEGA), 2024

Ruth Oluwadamilola Dairo is a dedicated civil engineer-in-training with over six years of experience spanning consultancy, construction, and the oil and gas industries. Known for her solution-driven approach and keen attention to detail, Ruth excels at collaborating with stakeholders to deliver outstanding results in technical support, contract administration, project management, and engineering initiatives.

Ruth's diverse skill set bridges engineering and business administration, with expertise in client relations, project coordination, and managing complex contracts. She has successfully handled international projects and implemented streamlined solutions for efficient operations. Her technical proficiencies include but are not limited to advanced use of Microsoft Office Suite, AutoCAD, and other specialized tools for project management, design, and data analysis.

Throughout her career, Ruth has demonstrated a strong ability to manage multidisciplinary projects, uphold regulatory compliance, and facilitate seamless communication across diverse teams. She is a certified Project Management Professional (PMP) and an active Project Management Institute (PMI) member. Additionally, she is an Engineer-in-Training (E.I.T.) with the Association of Professional Engineers and Geoscientists of Alberta (APEGA), building on her Master's degree in Civil and Environmental Engineering.

Currently expanding her conveyance engineering and asset management expertise, Ruth is committed to driving innovation and operational excellence in infrastructure and water systems. Her dedication and versatile skill set make her a valuable contributor to any engineering organization.

Relevant Project Experience:

- A Comparative Evaluation of Bamboo Reinforced Concrete Beam and Steel Reinforced Concrete Beam (Researcher) 2014-2015
- Tank farm expansion project 2 x 40,000 BBLS storage tank design for Midwestern Oil & Gas Company Limited (Civil Support Engineer) 2016-2017
- Engineering supervision for the construction of Patigi – Kpada Road (Civil Engineer), 2018-2019
- Development of a Framework for Preliminary Sizing of Multi-Storey Structural Elements Using Cantilever and Portal Methods (Researcher Civil Engineer) 2018-2019
- Construction of 25 housing for IDPS in Nganzai, Borno state /Nigeria /Bahago Services Limited (Civil Engineer) 2019-2020
- International Trade Restructuring Project: Rebranding and restructuring of business services and sales channel / Hong Kong / (Project Coordinator) 2021-2023
- A Multifaceted Analysis of Quantity Surveyors in Nigeria (Researcher Civil Engineer) 2024

Ajoke R. Onojeghuo, Ph.D., M.Sc., Google Data Analytics (Cert.), AWS Cloud Concepts (Cert.), IBM Big Data Foundations (Cert.), IBM Hadoop Foundations (Cert.), Tableau Visualization (Cert.)

GIS Technical Support

Years of Experience: 18

Role and Level of Involvement: Dr. Ajoke R. Onojeghuo is a GIS & Remote Sensing expert with experience spanning academia, industry, consultancy, and non-governmental organizations. With her skills, she will leverage advanced geospatial technologies to analyze, process, and manage spatial data related to CCTV systems' placement, functionality, and

Dr. Ajoke R. Onojeghuo is a Geospatial Data Consultant and GIS & Remote Sensing Specialist with over 15 years of experience across academia, industry, consultancy, and NGOs. Holding a Ph.D. in Geography from the University of Leicester, UK, her research focused on atmospheric pollutants in West Africa using satellite data. She also holds postgraduate degrees in GIS, Environmental Studies, and Surveying. Dr. Onojeghuo specializes in sustainable resource management, urban planning, and environmental monitoring, bridging engineering and data science for innovative solutions in asset management, engineering, and sustainability.

optimization. Also, she collaborates with multidisciplinary teams by developing and maintaining GIS databases, integrating real-time CCTV data into geospatial platforms, and creating interactive maps and dashboards to support decision-making.

EDUCATION

- M.Sc., Applied Mathematics, University of the Western Cape, South Africa, 2015
- Ph.D., Geography (Science) - GIS, Remote Sensing, University of Leicester, United Kingdom, 2017
- M.Sc., GIS & the Environment, University of Salford, Manchester, United Kingdom, 2011
- B.Sc., Surveying & Geoinformatics, University of Lagos, Nigeria, 2005
- Higher National Diploma (HND), Surveying & Geoinformatics, Federal School of Surveying, Oyo state, Nigeria, 2000

She has collaborated with diverse stakeholders, including UNICEF, on geospatial analytics, risk indicators, and disaster models in humanitarian contexts. Dr. Onojeghuo's expertise includes GIS, remote sensing, machine learning, and data visualization, which are applied in wetland mapping, land-use trends, and environmental monitoring. She is an experienced educator who has developed and taught postgraduate GIS and remote sensing courses.
Certified by organizations like the Society for Canadian Women in Science and Technology (SCWIST), Dr. Onojeghuo continuously advances her skills in emerging technologies like machine learning and health informatics, focusing on impactful engineering, data science, and environmental stewardship solutions.

Relevant Project Experience:

- Geospatial analysis of UNICEF WASH, WRI Aqueduct, and Drought indicators to generate global water stress and water variability indices (WSI and WVI) (Geospatial Analysis Consultant)
- Data collection app development using ArcGIS Survey 123, troubleshooting, and data cleaning (Senior Remote Sensing Specialist/Data Scientist)
- Geospatial data analysis, visualization, and map production using raster, ggplot2, and lattice packages in R to determine pollution hotspots in West Africa (Researcher)
- Geospatial analysis of cancer-causing pollutants from oil and gas exploration in creeks and streams in Edo, Nigeria (Geospatial Data Analyst)
- Research and development of new methods for flood and drought indices (SPI, VCI, PDSI) using Google Earth Engine and R to process Satellite and Ground data (CHIRPS, MODIS Vegetation indices, etc.) (Geospatial Analysis Consultant)
- Development of automated mapping algorithms using R to map risk indicators by country for each UNICEF region in 1 hour (Geospatial Analysis Consultant)

CERTIFICATIONS & TRAINING

- Fundamentals of Databricks Lakehouse Certificate, Databricks Academy, Online, 2023
- Google Data Analytics Professional Certificate, Google/Coursera, Online, 2022
- Power Business Data Analytics, Edureka, Online, 2021
- Introduction to AWS for Non-Engineers: Cloud Concepts IBM, Certificate, LinkedIn Learning, Online, 2019
- The Data Scientist's Toolbox, Coursera, Online, 2017
- Big Data Foundations - Level 1 IBM, Certificate, Online, 2017
- Hadoop Foundations - Level 1 IBM, Online, 2017
- Fundamentals of Visualization with Tableau, Johns Hopkins University, Online, 2017

4.0 PROJECT SCHEDULE

4.1 Proposed Work Schedule

Our proposed Work Schedule for this project is presented in **Table 4**. **Figure 2** shows our proposed workflow in the Gantt Chart for this project. This assumes an 'authority to proceed' on or before July 23rd, 2025.

Table 4: Proposed Project Schedule

Task Name	Start Date	End Date	Duration	Key Activities
Task 1 Infrastructure & Asset Risk-Based Condition Assessment	July 23, 2025	August 29, 2025	5 weeks	• Asset Data Review and Analysis • Detailed Desktop Condition Assessment • BRE Score Calculation
Task 2 Detailed Asset Risk Analysis & Prioritization	August 16, 2025	September 19, 2025	5 weeks	• Risk Matrix Application • Prioritize Assets • Finalize Prioritized Action List
Task 3 Options Assessment & Analysis	September 18, 2025	October 15, 2025	4 weeks	• Propose Capital & Operational Options • Perform Lifecycle Cost Analysis (LCC) & Cost/Benefit Analysis
Task 4 Develop a Prioritized Action (Option) List	October 10, 2025	November 5, 2025	3.5 weeks	• Stakeholder Workshops • Risk and Consequence Mapping • Finalize Cost Estimation for Actions
Task 5 Develop a Ten-Year Capital Plan	November 6, 2025	December 3, 2025	4 weeks	• Develop Capital Project Timeline • Financial Sustainability Strategy • Funding Strategy & Forecasting
Task 6 Develop an Operating Plan	December 1, 2025	December 24, 2025	3 weeks	• Identify Operational Actions • Allocate Resources • Finalize Operational Funding Strategy
Deliverables: Draft & Final Report	December 8, 2025	December 31, 2025	3 weeks	• Compile All Sub-deliverables • Draft Executive Summary and Detailed Report • Submit Draft for Review & Finalize Report
Project and Quality Management				
Project Management Ongoing Coordination & Management	July 23, 2025 December 31, 2025		5 months	• Weekly updates, & coordinate all tasks • Risk Management & QAQC, Cost Control
Risk Management Ongoing Risk Tracking & Mitigation			5 months	• Monitor & mitigate risks • Update risk register and reports
QAQC Procedures Ongoing Quality Control & Assurance			5 months	• Regular quality checks • Final review of deliverables
Cost Control Ongoing Cost Monitoring & Reporting			5 months	• Monitor budget • Adjust cost estimates as needed • Report financial status to stakeholders

For the proposed project schedule presented in **Table 4**, we made the following assumptions:

- The activities have been structured to ensure appropriate time for each team member (Project Manager, Technical Advisor, Project Technical Lead, etc.) to contribute effectively to each phase.
- The plan is based on a critical-path approach—tasks are assumed to be on time and follow logical dependencies.
- Overlap and Task Dependencies: Certain tasks in later stages will rely on data from earlier tasks, ensuring a smooth transition between activities.
- Some tasks like "Asset Desktop Condition Assessment" and "Development of Deliverables" have been given some flexibility (i.e., buffer time) to allow for review, feedback, and minor adjustments.

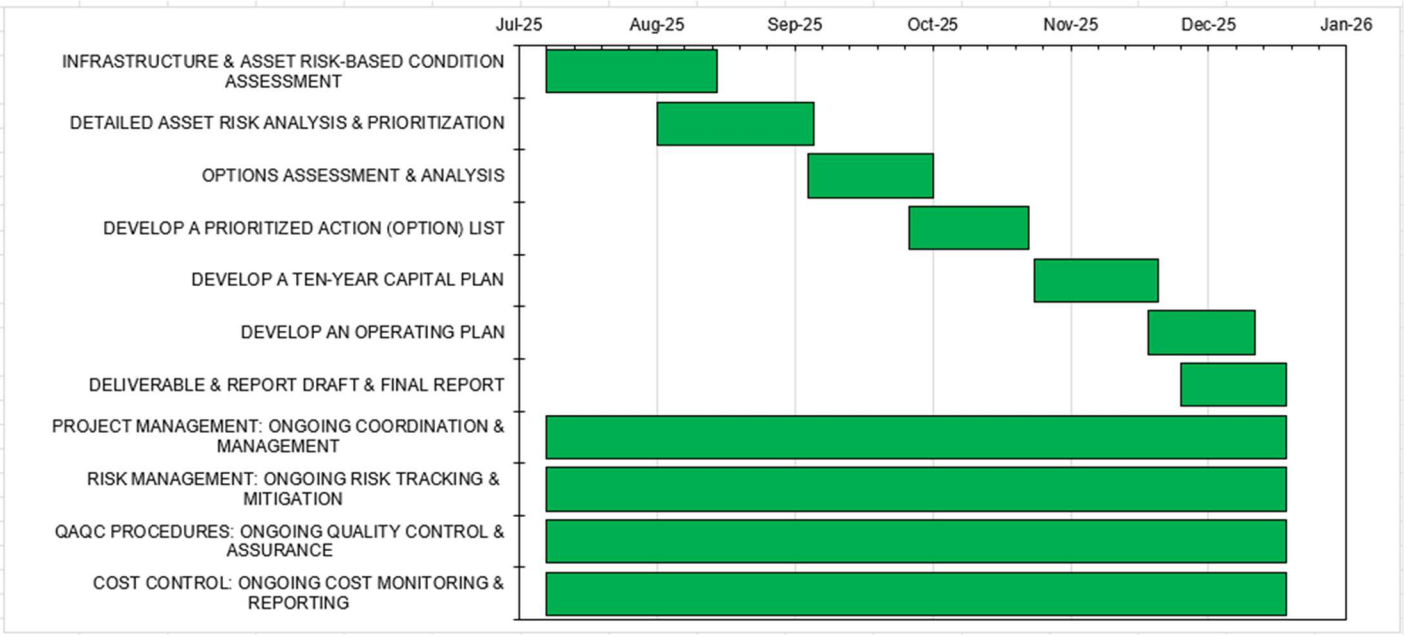


Figure 2: The Proposed Project Workflow

5.0 PRICING AND ASSUMPTIONS

5.1 Fees and Time-Task Matrix

Avodahtec proposes undertaking the proposed professional service components on a time and materials basis; alternatives such as a 'fixed fee' option may be considered. The proposed budget includes all overhead and margins for the scope of work presented herein, excluding all applicable provincial and federal taxes. **Table 5** shows our proposed Time-Task Matrix and Work Plan for our services, with a detailed price schedule and the proposed level of effort to complete the deliverables.

Table 5: Time-Task Matrix with Estimated Hours and Associated Cost

Task	Activity	Estimated Hours	Total Cost
Task #1: Infrastructure & Asset Risk-Based Condition	A. Asset Data Review and Analysis	50	$5,500
	B. Detailed Desktop Condition Assessment	80	$8,800
	C. Site Access and Field Verification (3 days)	48	$5,280
	D. BRE Score Calculation	30	$3,300
	Task Sub-Total	**208**	**$22,880**
Task #2: Detailed Asset Risk Analysis & Prioritization	A. Risk Matrix Application	40	$4,400
	B. Prioritize Assets	60	$6,600
	C. Finalize Prioritized Action List	30	$3,300
	Task Sub-Total	**130**	**$14,300**
Task #3: Options Assessment & Analysis	A. Propose Capital & Operational Options	40	$4,400
	B. Perform Lifecycle Cost Analysis (LCC)	54	$5,940
	C. Cost/Benefit Analysis	40	$4,400
	Task Sub-Total	**134**	**$14,740**
Task #4: Develop a Prioritized Action (Option) List	A. Stakeholder Workshops	40	$4,400
	B. Risk and Consequence Mapping	35	$3,850
	C. Finalize Cost Estimation for Actions	35	$3,850
	Task Sub-Total	**110**	**$12,100**
Task #5: Develop a Ten-Year Capital Plan	A. Develop Capital Project Timeline	40	$4,400
	B. Financial Sustainability Strategy	40	$4,400
	C. Funding Strategy & Forecasting	30	$3,300
	Task Sub-Total	**110**	**$12,100**
Task #6: Develop an Operating Plan	A. Identify Operational Actions	30	$3,300
	B. Allocate Resources	30	$3,300
	C. Finalize Operational Funding Strategy	30	$3,300
	Task Sub-Total	**90**	**$9,900**
Deliverables & Report Draft & Final Report	A. Compile All Sub-Deliverables	30	$3,300
	B. Draft Executive Summary and Detailed Report	50	$5,500
	C. Submit Draft for Review & Finalize Report	30	$3,300
	Task Sub-Total	**110**	**$12,100**
Project & Quality Management	Project Management, Project Coordination, Risk Management, QAQC Procedures, and Ongoing Cost Monitoring & Reporting	**170**	$17,700
	Task Sub-Total	**170**	**$17,700**
	Disbursement (Site/Field Verification)	**-**	**$2,200**
	Grand Total	**962**	**$118,020**

5.2 Assumptions

Our project team has made the following assumptions in preparing the scope of work, schedule, and fee for this proposal:

1. Our team is ready to commence with the project as soon as notice of award is received. Our schedule assumes a start date of July 23rd, 2025.

2. It is anticipated that the Village will provide all required asset systems attribute data (or provide Avodahtec online access where applicable) to complete some of the tasks listed in the proposal. Where necessary, Avodahtec will assist in identifying the data.

3. It is assumed that the major tasks outlined in the RFP represent the core requirements for the infrastructure audit. Upon award, our team will review these tasks and, where appropriate, recommend modifications or enhancements in consultation with the Village to ensure alignment with the project objectives.

4. While the majority of tasks and activities will be completed through desktop analysis, we assume that site visits will be necessary to assess key infrastructure components (e.g., the water treatment plant, wells, reservoir, pump house, and portions of the collection system). Our proposed scope includes up to 3 days of on-site inspection, to be coordinated with Village staff. Should more extensive field investigations be required, we will collaborate with the Village to define the appropriate scope, schedule, and budget adjustments.

5. Environmental assessments or studies, such as ecological or environmental impact assessments for any proposed works, are not included in the scope of work.

6. In cases where previously made and documented decisions are reversed, or when the scope of work is revised, we cannot assure that the proposed fees or schedule will not be impacted.

7. Lifecycle costs (LCC) are largely determined during design. Avodahtec will work with the Village's operations, maintenance, and engineering staff to obtain essential asset data. If unavailable, we will benchmark against similar municipalities and industry best practices.

8. We understand the importance of verifying the condition of sanitary mains and manholes through video inspection. As part of our proposed pricing, Avodahtec can support the Village in reviewing CCTV inspection data. Our team can assist in analyzing the footage to help prioritize repairs or replacements based on actual asset condition, ensuring informed and cost-effective decision-making.

REQUEST FOR DECISION 25-08-069

MEETING: Special Council Meeting **Date: August 11, 2025**

AGENDA NO.: 3 b)

TITLE: New Business -Village of Cremona to Purchase a Plow and Plow Box

ORIGINATED BY: *Karen O'Connor,* CAO

BACKGROUND / PROPOSAL: The Village of Cremona is dealing with an aging plow that's becoming costly to maintain. Given its age and the high hours of operation. Public Works has found a new plow and plow box with a $6,000 saving! This is a good opportunity to replace the aging equipment and reduce ongoing maintenance costs. The village has money in the budget to cover this purchase.

DISCUSSION / OPTIONS / BENEFITS / DISADVANTAGES:

COSTS / SOURCE OF FUNDING (if applicable):
$10,000

RECOMMENDED ACTION:

MOTION THAT Official Administrator, Doug Lagore approves the Village of Cremona to purchase a plow and plow box from Alberta Plows Inc. at a cost of $10,000.

INTLS: CAO KO

Quote

Date 4/9/2025

Quote # 23-2807

GST No. 891421588

DISTRIBUTION & SALES: BOSS & DANIELS SNOW REMOVAL EQUIPMENT

DEALER: ARCTIC SNOW PLOWS

BAY 2 245 2ND AVE E COCHRANE AB T4C 2B9 403-932-5063 **info@albertaplows.com**

Customer:

VILLAGE OF CREMONAB
BARRY WIENS
PO BOX 10
CREMONA AB T0M0R0
403-888-3947

QUOTES ARE VALID FOR 30 DAYS ONLY

Item	Quantity	Description	Price ea.	Total
MSC10192B-U	1	9 2 VXT PLOW	4,000.00	4,000.00
MSC15005C-U	1	PLOW BOX RT3	5,523.81	5,523.81
		GST on sales	5.00%	476.19

We look forward to doing business with you!

Subtotal	**$9,523.81**
Sales Tax Total	**$476.19**
Total	**$10,000.00**

VILLAGE OF Cremona

MEETING: Special Council Meeting	**Date: August 11, 2025**
AGENDA NO.: 4	
TITLE: Adjournment	
ORIGINATED BY: *Karen O'Connor,* CAO	

BACKGROUND / PROPOSAL:

A Member of Council will move to adjourn the meeting.

RECOMMENDED ACTION:

MOTION THAT Official Administrator Doug Lagore adjourns the Village of Cremona Special Council Meeting on the 11th day of August at_____p.m.

INTLS: CAO: KO