



Engineering
for **people**

Municipality of Strathroy-Caradoc

RFP No. 2025185

Class EA for Mt Brydges Wastewater Servicing

Technical Specification

Friday, July 18, 2025

CIMA+ No: O0015814

Submitted by CIMA+

140 Fullarton Street Suite 1600, London ON
N6A 5P2 CANADA

Contact

Bram Bontje

E: Bram.Bontje@cima.ca

T: 519-203-1222 | M: 226-678-7056





Engineering
for people

Friday, July 18, 2025

Municipality of Strathroy-Caradoc, 52 Frank Street, Strathroy ON N7G 2R4

TECHNICAL PROPOSAL

Attention: Accounts Payable Officer
RE: RFP#2025185 - Class EA for Mt Brydges Wastewater Servicing

CIMA Canada Inc. (CIMA+), is pleased to provide the Municipality of Strathroy-Caradoc (the Municipality) with our response to the Request for Proposal for the Class EA for Mt Brydges Wastewater Servicing.

CIMA+ recognizes the importance of delivering this high-priority project for the Municipality in a way that respects and engages stakeholders, explores practical technical solutions and enables future growth. CIMA+ has assembled a comprehensive, and experienced team to achieve these goals. In particular:

- Our highly trained and experienced team has deep knowledge of the technical solutions available to achieve future wastewater treatment needs.
- We bring an experienced consultation team, including respected industry experts who will guide the engagement and communications process.
- Technical experts in the field of hydrogeology and hydrology related specifically to landfill impacts on the natural environment.
- We have strong local leadership supported by experts in various centers of excellence which will provide great depth in their respective disciplines, allowing us to present a tangible and feasible long-term approach.

CIMA+, together with L³ ESP, Hutchison Environmental and Archaeological Research Associates Ltd, bring the necessary qualifications and experience to deliver all aspects of the Class EA for Mt Brydges Wastewater Servicing

We trust that our submission will provide the Municipality of Strathroy-Caradoc with a comprehensive overview of our understanding of the requirements, as well as demonstrate our capability, capacity, and dedication to the successful delivery of all services required. Please feel free to contact Bram Bontje at 519-203-1222 or at Bram.Bontje@cima.ca if you would like to discuss any aspect of the enclosed information. We look forward to favourable consideration of this proposal, and an opportunity to continue working with the Municipality of Strathroy-Caradoc.

Sincerely,

CIMA Canada Inc.

Kelly Frensch, P.Eng.
Partner, Executive Director

Table of Contents

1 Corporate Profile	1
1.1 About CIMA+	1
1.2 Subconsultants' Corporate Profiles	2
1.2.1 Archaeological Research Associates	2
1.2.2 GEO Morphix	2
1.2.3 Hutchinson Environmental Sciences Ltd.	2
1.2.4 L3 ESP Ltd. Environmental & Strategic Planning	2
1.2.5 Redbrick Communications	3
1.2.6 Watson Associates	3
1.3 Chart	3
2 Project Understanding, Work Plan & Methodology	3
2.1 Project Understanding	3
2.2 Purpose And Key Issues	5
2.3 Project Work Plan & Methodology	6
2.3.1 Phase 1: Identifying Problem or Opportunity	8
2.3.2 Phase 2: Alternative Solutions	10
2.3.3 Phase 3: Identification and Evaluation of Alternative Design Concepts	16
2.3.4 Phase 4: Environmental Study Report	17
2.3.5 Provisional Items	18
3 Project Team Qualifications	18
3.1 Personnel Commitment	22
4 Project Reference	22
5 Schedule & Time-Task Matrix	25

Appendices

Appendix A Resumes

Appendix B Project Sheets

Appendix C Gantt Schedule

Appendix D Time-Task Matrix

1 Corporate Profile

1.1 About CIMA+

Founded in 1990 through the merger of several well-established consulting engineering firms, CIMA+ is Canadian owned and operated. Today, with more than 35 offices coast-to-coast across Canada, CIMA+ employs more than 3,400 people: over half of whom share ownership in the company, including 533 partners and associate partners. This personal investment on the behalf of our employees translates to a steadfast dedication to projects and clients that has propelled CIMA+ to rank among the three largest consulting engineering firms in Canada.

In Ontario, CIMA+ employs more than 600 personnel within our 11 regional offices in Barrie, Bowmanville, Burlington, Guelph, Kitchener, London, Mississauga, Ottawa, Red Lake, Thunder Bay and Toronto, CIMA+ guarantees local knowledge and provides personal service, while simultaneously possessing sufficient resources and technical expertise to tackle projects of any level of complexity.

CIMA+ believes that engineering and urban design exists to improve and enhance the lives around us by helping to meet the many challenges of today and tomorrow. In response to this, and as a result of our high-level of service, delivery of conventional and leading-edge solutions, and dedication to innovation, quality, and service, CIMA+ ranks among North American leaders in all of its service areas and has been recognized through numerous engineering awards. The pride we have in our work translates to our clients where our mission is to provide integrated services and deliver effective solutions while maintaining a spirit of partnership because when you engineer for people, you also engineer for a better world.

CIMA+ has extensive experience leading Schedule C and B Class Environmental Assessments (EAs) for water and wastewater infrastructure projects across Ontario. Our portfolio includes comprehensive EAs for new and upgraded treatment plants in Wellington, Petrolia, Russell, Chatham-Kent, St. George, and Niagara Falls, addressing complex challenges such as ammonia removal, biosolids management, climate resilience, and regional servicing strategies. We have delivered full-lifecycle services from EA through to detailed design and construction, incorporating innovative technologies like MBBR, S2EBPR, and Real-Time Control, while maintaining strong stakeholder and First Nations engagement throughout.

Our team also has extensive experience investigating and managing landfill impact on the natural environment.

CIMA+ is proud to be a firm member in good standing with the Association of Consulting Engineering Companies - Ontario (ACECO), CoR certified (cert #: 20240220-202424385), ISO 9001:2015 certified, and fully AODA compliant.



Engineering for **people**

CIMA+ provides a full range of services across eight primary markets:

- Municipal Infrastructure
- Transportation
- Buildings Engineering
- Water / Wastewater
- Energy & Resources
- Sustainability
- Earth & Environment
- Operational Technology

1.2 Subconsultants' Corporate Profiles

1.2.1 Archaeological Research Associates

Established in 1972, ARA is Ontario's oldest archaeological and heritage consulting firm, with over 1,000 completed contracts across sectors. Headquartered in Hamilton and Kitchener with a staff of 40, ARA also operates a satellite office in Owen Sound. ARA offers integrated archaeological, marine heritage, and cultural heritage services, delivering seamless, cost-efficient assessments. Services include Stage 1–4 assessments, marine archaeology, cemetery investigations, GIS, and conservation services. Experienced across diverse legislative frameworks, ARA is a registered RAQS consultant and Vendor of Record for multiple public agencies.

1.2.2 GEO Morphix

GEO Morphix are a team of professional geoscientists and environmental experts focused on geomorphology, earth surface processes, and watershed science. Geo Morphix specializes in river and shoreline restoration, erosion hazard delineation and mitigation, environmental monitoring and hydrometrics, and projects that require an in-depth understanding of erosion, sedimentation and sediment transport. Their team of industry leaders provide observation-rich answers based on a balanced application of quality science and years of experience to achieve practical, implementable, and acceptable solutions for all stakeholders.

1.2.3 Hutchinson Environmental Sciences Ltd.

Hutchinson Environmental Sciences Ltd. (HESL) is a consulting firm which specializes in aquatic science, technical facilitation, and peer review services. HESL formed in 2009 and have completed over 900 projects since inception. They provide science-based and client focused environmental consulting services to industry, developers, government, and non-government organizations across Canada from offices in Bracebridge, Guelph, and Meaford Ontario. The HESL staff profile is focussed on expertise and experience to provide creative and feasible solutions to its projects, and have experience working on assimilative capacity studies, water quality modelling in-lake and whole watershed mass balance studies, near-field mixing and far-field assimilation modelling, aquatic nutrient and algal management, watershed planning and protection, and aquatic ecology.

1.2.4 L3 ESP Ltd. Environmental & Strategic Planning

Founded and led by Laurie Boyce, L3 ESP Ltd. specializes in environmental and strategic planning services with nearly four decades of leadership in Environmental Assessments, infrastructure strategy, stakeholder consultation, and regulatory approvals. With deep expertise in Ontario's planning and environmental legislation, L3 ESP provides advisory services to public and private clients across Canada. Projects span municipal wastewater, biosolids, stormwater, and water management, with services that include Class EAs, Master Plans, consultation programs, and Indigenous engagement. L3 ESP delivers strategic, technically sound, and regulatory-compliant solutions that align with community needs, sustainable growth, and evolving legislative requirements.

1.2.5 Redbrick Communications

Since 2002, Redbrick Communications has delivered strategic communications, public relations counsel, and specialized training to clients across Canada. With deep roots in government and public sector work, Redbrick is recognized for its leadership in municipal communications, having supported more than a quarter of Ontario's 444 municipalities. From issues management and stakeholder engagement to council report writing and crisis communications, Redbrick offers comprehensive services tailored to public-sector needs. Longstanding client relationships and referral-based growth reflect Redbrick's trusted, results-driven approach. Their strength lies in a nuanced understanding of municipal communications, and in helping organizations communicate clearly, effectively, and with confidence.

1.2.6 Watson Associates

Founded in 1982, Watson & Associates Economists Ltd. is one of Canada's leading municipal finance consulting firms. With a multidisciplinary team of 43 economists, planners, and accountants, Watson serves over 250 municipalities and 47 school boards across Ontario. The firm is widely recognized for its expertise in development charges, fiscal impact analysis, asset management, and financial planning. Known for its evidence-based approach, stakeholder consensus-building, and public engagement, Watson has also provided expert testimony before the Ontario Land Tribunal for over four decades. Clients rely on Watson for clear analysis, trusted advice, and solutions that balance financial sustainability with community growth.

1.3 Org Chart

We have assembled a qualified team with relevant experience to deliver this project. Our team will be lead by Bram Bontje as the project manager with direction from a seasoned QA/QC team and delivered by an EA team with experienced leads. Our proposed Organizational Chart is provided next page and additional information is provided in Section 3.

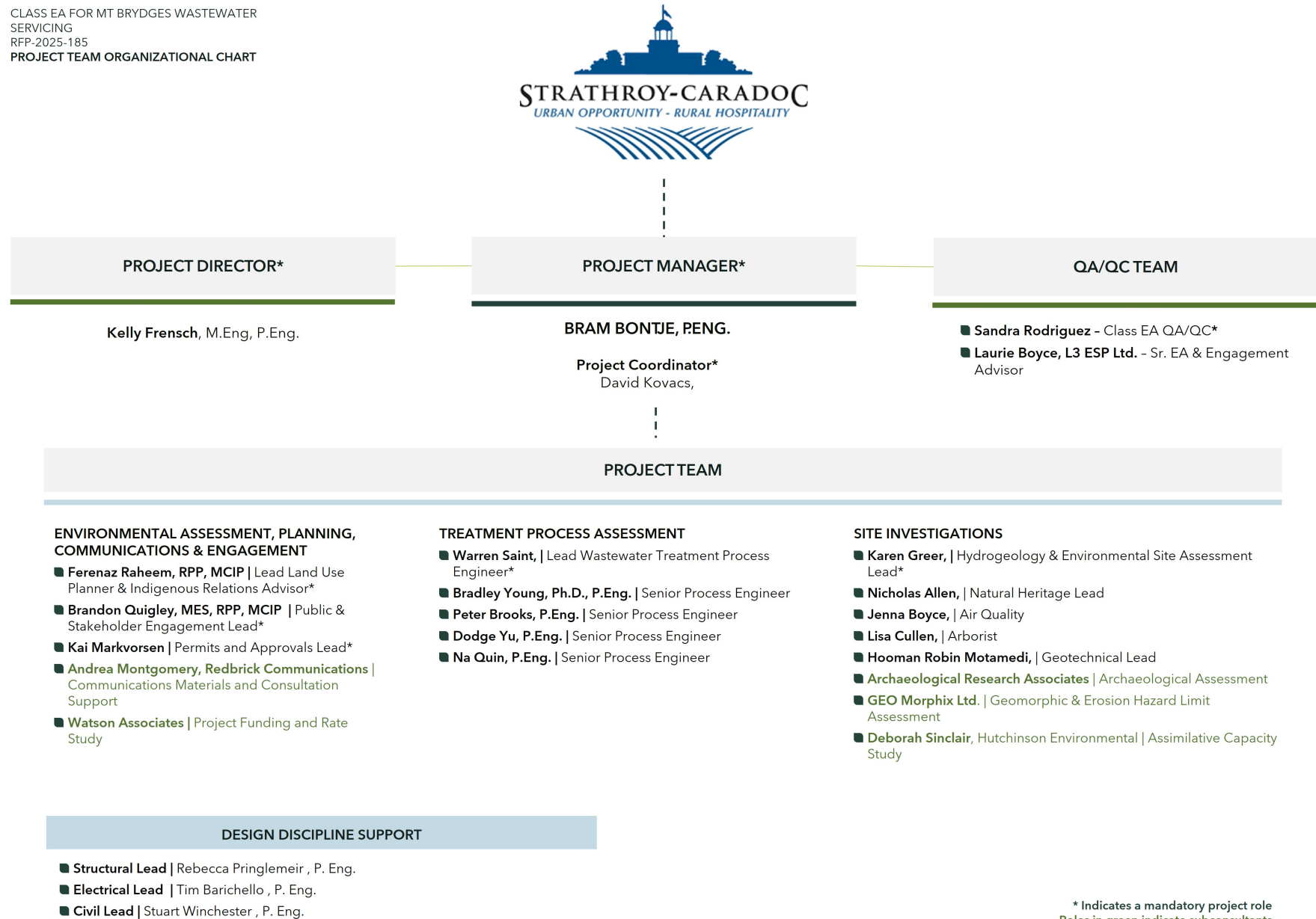
2 Project Understanding, Work Plan & Methodology

2.1 Project Understanding

The Municipality of Strathroy-Caradoc (Strathroy Caradoc) is a growing community with significant potential for future development both within its existing Strathroy and Mount Brydges settlement areas, and through future urban expansion. The 2024 Water, Wastewater and Stormwater Master Plan (Master Plan) projected growth in the Mount Brydges settlement area from 3,300 in 2021 to 7,500 by 2046. This substantial population growth will be accompanied by an increased demand for municipal services including wastewater treatment.

The Mount Brydges Wastewater Treatment Facility (MBWWTF) is projected to receive flows exceeding its rated capacity of 825 m³/d between 2026 and 2031. Flow contributions from planned developments already receiving draft municipal approval would result in a nearly 500 m³/d capacity deficit, highlighting the urgency of providing additional treatment capacity. In addition to addressing the capacity required for immediate term growth, the MBWWTF will need to accommodate further build-out of the Mount Brydges settlement area through 2041 as well as the ongoing connection of existing residents on private septic systems to municipal sewers.

CLASS EA FOR MT BRYDGES WASTEWATER
SERVICING
RFP-2025-185
PROJECT TEAM ORGANIZATIONAL CHART



The MBWWTF operates using a Rotating Biological Contactor (RBC) treatment process and has struggled to meet its regulatory performance limits in recent years. Performance of the MBWWTF, and potential options to improve the existing system, have been an area of focus for municipal staff and council, garnering significant community interest. We also understand that suggestions have been made informally to staff and council by members of the public and the developer community that the site of the existing MBWWTF may be unsuitable for future use, or that treatment facility located elsewhere in the community would be better aligned with the needs of future growth. A decision to move a treatment facility to a new location may come with substantial design, cost and regulatory challenges and the Class EA process is designed to provide an established, methodical approach, developing a range of suitable alternatives, obtaining stakeholder feedback and selecting a preferred solution that will service the community's long term needs.

MBWWTF is located in proximity to the Caradoc Closed Landfill. The southwesterly portion of the site was formerly used for the disposal of waste and is currently being used as a Waste Transfer Station (WTS). The Caradoc Landfill began operation in approximately 1967 and landfilling operations were discontinued in February 1999. A Closure Plan was submitted to the Ministry of Environment, Conservation, and Parks (MECP) in November 2008. During Investigation work completed to support the existing MBWWTF in 2012, buried waste was discovered in the location of the proposed facility and was relocated to the northwest face of the landfill mound. Annual groundwater monitoring and sampling is completed at the site in accordance with MECP requirements for the Site. Concentrations of leachate parameters are reported above the applicable provincial guidelines in both surface water and groundwater. The potential impacts of the landfill on the natural environment need to be considered as part of the EA process.

Completion of the Class EA for the MBWWTF will require a consulting team with the depth of technical knowledge and public consultation experience required to make informed decisions about the existing treatment process and site, screen potential new locations for consideration and effectively engage with a wide range of stakeholders in a way that is transparent, respectful and makes individuals feel heard, regardless of the chosen outcome.

The CIMA+ project team and our subconsultants **L3 ESP Ltd., GEO Morphix, Redbrick Communications, Archaeological Research Associates, Hutchinson Environmental and Watson Associates** have been assembled to provide these skills for the Municipality as part of this project.

2.2 Purpose And Key Issues

To successfully complete the work, CIMA+ has identified several key opportunities aligned to meet the Municipality's needs.

Key Issues	Opportunities / Risk Mitigation	Benefit to the Region
1) Public Education and Engagement	Recognizing that this project's decisions will impact many stakeholders with diverse interests, the Municipality has underscored the importance of public engagement in the RFP, above and beyond the basic requirements for a Class EA. Broad	CIMA+ has partnered with public education and engagement industry titan, Laurie Boyce, who will provide senior guidance to the EA team in developing our engagement approach. We have also engaged Redbrick Communications, who bring

Key Issues	Opportunities / Risk Mitigation	Benefit to the Region
	acceptance of this project hinges on effective communication throughout its duration.	extensive experience guiding Municipalities across Ontario through challenging communication and stakeholder facilitation processes. Within the CIMA+ internal team, Ferenaz Raheem, Sandra Rodriguez and bring extensive municipal infrastructure planning experience.
2) Experience and Understanding of Established and Emerging Technologies	The CIMA+ design team has recently completed a comprehensive review of treatment technologies for the MECP. We understand provincial design guidelines and how they may shape the future of wastewater treatment. We also bring demonstrable experience with the design and implementation of less common and emerging technologies, including AGS, MABR, MBBR and IFAS that may be considered for future use at the MBWWTF.	The Municipality can trust that the treatment technologies we evaluate will lead to practical, well-performing, and fiscally responsible solutions. Our approach will consider unique site-specific needs and incorporate the latest understanding of treatment technologies. These optimized solutions will significantly improve the Class EA's effectiveness, benefiting the Municipality in both immediate decision making and long-term planning.
3) Extensive understanding of existing facility and current challenges.	To meet the project's goals it is essential for the project team to have first-hand knowledge of the facility and the challenges faced by operations. This will ensure the technical solutions identify and focus on the Municipality's unique site-specific needs.	The Municipality will have continuity with the CIMA+ PM and key treatment process assessment technology team members involved in the previous MBWWTF process review.
4) Detailed understanding of the Site setting and potential impacts	The Site setting in close proximity to the landfill and the potential impacts to the natural environment (soil, surface water, groundwater etc.) need to be well understood to assess the decision making as part of the EA.	The CIMA+ has a detailed understanding on the potential impacts landfills can have on the natural environment and how to provide input and mitigation measures to reduce project risk.

2.3 Project Work Plan & Methodology

The Schedule C Class EA Process defined by the MECP provides a broad framework for the core activities that must be completed at each of the four "stages" but must incorporate additional studies and consultation tasks to fit the specific needs of each project. We have carefully considered the Municipality's needs in developing our approach to tasks and identifying how the project needs will be addressed.



2.3.1 Phase 1: Identifying Problem or Opportunity

During Phase 1, the project study area and the groups impacted by the project outcome must be identified. This includes regulatory agencies, local stakeholder groups, indigenous communities and members of the general public. During this phase the “statement of problem/opportunity” is defined which clearly states the need that the EA will address. Our Phase 1 tasks are identified below.

2.3.1.1 Project Kickoff Meeting

This initial meeting (virtual) will be conducted to review project scope and introduce key project leads. The CIMA+ Project Director, Project Manager, Project Coordinator and Class EA QA/QC leads will participate.

2.3.1.2 Data Collection and Review

We will request and review copies of relevant background documents for the EA including:

- The current Official Plan (OP).
- Complete Wastewater and Stormwater Master Plan (Master Plan).
- Most recent servicing water and wastewater rate study.
- Details of submitted and draft-approved developments in the settlement area and details of any informally proposed developments outside the current urban growth boundary.
- MBWWTP operating and design data and regulatory correspondence.
- Previous site investigation studies completed at the MBWWTF or the adjoining closed landfill (Closure Plan, Annual Monitoring Reports, historical investigation reports etc.).
- Any information detailing prospective alternative WWTF site locations that may have been developed by the Municipality, or put forward informally by other groups.

2.3.1.3 Development of a Public Relations and Communications Plan

The Public Relations and Communications Plan will serve as a framework for the CIMA+ and Strathroy-Caradoc team to outline the strategies for communication and consultation with Stakeholders and Indigenous Communities to meet Class EA requirements project consultation goals. The plan will be developed and submitted to the Municipality during Phase 1 and will be updated as required throughout the project. **Redbrick Communications** and **Laurie Boyce of L3 ESP** will provide input to the development and review of this document. Key features will include:

- Project communication goals and principles
- Identification and categorization of stakeholder groups including a sensitivity assessment and engagement matrix detailing the level of information provided to each group how they will contribute to decision making processes throughout the project
- Engagement roadmap documenting how each stakeholder group will be engaged at each major project milestone
- List of planned consultation meetings and notices

- Preliminary project contact list (Excel format) that will be maintained throughout the project
- Key strategic themes and messages to be emphasized in project communication
- Outline of the timing approach and scope of Indigenous Engagement

2.3.1.4 Technical Memorandum #1 (TM1) - Identification of Problem and Opportunity

TM 1 will provide an overview of the CIMA+ team's understanding of the project background and will propose the problem opportunity statement to be used in the EA study. TM1 will include a draft Notice of Commencement and the Public Relations and Communications plan as an appendix.

We have assumed presentation and review of this material will be for the benefit of Municipal staff and council only, to allow for revisions prior to public release. This approach to review is recommended for subsequent TMs in the EA, which will be submitted for staff and council review prior to sharing key information in Public Information Centres (PICs)

2.3.1.5 Initial Contacts with Indigenous Communities and Stakeholder Groups

We have assumed that the MECP and/or Municipality will identify the indigenous groups who are to be engaged as part of this project. The project team will make initial contact with groups during Phase 1. Initial contacts will occur after the communications plan and problem/opportunity statement have been reviewed by the municipality, but prior to releasing public notices. Initial contacts will include:

- Drafting a letter providing a high-level summary of the project location and scope and the team's anticipated consultation milestones.
- Follow up correspondence (email or phone) to confirm the letter was received and responding to questions.

Follow-up meetings with Indigenous groups (if necessary) will be held later in the project when study materials have been further developed based upon the level of interest and feedback received.

2.3.1.6 Public Engagement Materials

The CIMA+ team, aided by Redbrick Communications, will develop initial public engagement materials for the project. These will include:

- Notice of Commencement
 - Digital-format notice suitable for online posting or email distribution including a study area map, description of scope and project contacts. Combining the Notice of Commencement and Public Information Centre (PIC) #1 notice may be recommended based on project schedule
 - Printed copies of the notice of commencement, if required, will be produced and distributed by the Municipality
- Project Website Content
 - Project website content will be adapted from the Notice of Commencement. We have assumed material will be posted on a dedicated page within the Municipality's

website, maintaining a consistent style and layout with other study and municipal program pages. Graphics to augment text will be provided as required.

- The project team will provide updates for the project webpage as required, including electronic copies of consultation materials, comment forms and updated contact information. The Municipality will be responsible for posting the content and maintaining the overall website.
- Additional content produced by the project team is expected to consist of the following:
 - Public meeting notices for each of the four (4) PICs suitable for website posting, and print (mail) distribution and publication in local newspapers
 - Assistance in the review of visual and communications elements of PIC display materials
 - Graphic announcement content suitable for social media announcements for each PIC and ESR review period (5 total)

2.3.1.7 PIC #1

PIC #1 will be held at the conclusion of Phase 1 of the Class EA. This PIC will:

- Introduce the project team
- Define the project the study area
- Outline the need for the Class EA and the EA problem/opportunity statement
- Summarize Municipal Class EA process and planned future work including evaluation steps and future public engagement opportunities
- Provide an opportunity for the public to ask questions, clarify details, and provide targeted input on existing conditions, and considerations to guide the development of alternative solutions

PIC 1 will be held in-person at a venue arranged and provided by the Municipality. Printed boards will be prepared by the CIMA+ team. Mailing of printed PIC announcements, if required, will be coordinated by the Municipality. Comment forms will be provided in-person at the venue and made available on the project website alongside digital copies of the presentation boards. We have assumed this process will be followed for the three subsequent PICs

2.3.2 Phase 2: Alternative Solutions

Phase 2 of the Class EA process requires proponents to “Identify Alternative Solutions to the Problem or Opportunity. Alternative solutions to be considered may include:

- Upgrading and expanding the existing capacity of the MBBWTF as the primary treatment facility for the community
- Diverting some or all wastewater from the MBTWTF to the Strathroy WWTF
- Building a new treatment facility to replace the MBWWTF at a new site
- Building a new facility to accommodate a portion of current and future flows at a new site, while retaining the MBWWTF in operation

Site investigation studies must be completed during Phase 2 to allow the suitability of the existing site for future expansion to be confirmed. The choice of location to construct additional wastewater treatment capacity is expected to generate substantial interest and we propose that both PIC #2 and PIC #3 be held during phase 2. PIC #2 will review treatment needs and the scope of alternatives being considered and PIC #3 will present the chosen alternative.

Key tasks and studies completed during Phase 2 are described below:

2.3.2.1 Treatment Facility Needs Assessment

This Class EA will build upon recent work planning work, completed by the Municipality, including the 2022 updated Official Plan settlement area boundaries for Mount Brydges and Residential Land Needs Assessment. We will also draw on the 2024 Water, Wastewater and Stormwater master plan and Housing inventory.

To ensure a solution is selected that would be aligned with future urban growth we will consider possible servicing scenarios requiring settlement boundary expansion. These needs may be taken into consideration in selecting a preferred alternative and identified as a future provisional servicing need in the EA, but may not necessarily be incorporated into the capacity of the preferred alternative stated in the Environmental Study Report. The parallel exercise to formally amend the Official Plan and expand the serviced boundary would impact the timeline to complete the Class EA and implement the chosen approach.

Specific items we will review during this study include:

Review of Planning Information

- We will work with Watson associates to understand the current population projections, and land inventory estimates.
- Growth projection information will be used to establish approximate dates for ultimate build-out of the settlement area and potential initial wastewater servicing phases

Future Servicing Area Assessment

- Long-term (30-50 year) community growth projections involving settlement boundary expansion cannot be predicted accurately at this stage. We will work with Watson and the Municipality to identify areas outside the existing urban boundary where there is a demonstrated interest in commercial or residential growth and consider the possible servicing needs, and total population, should these locations be developed.
- The future servicing area assessment will help the CIMA+ team select potential alternative treatment locations that could be considered in Phase 2.

Hydraulic Analysis and System Capacity Assessment

- Collection and conveyance system capacity was modeled in PCSWMM as part of the 2024 Master Plan. We will review model outcomes but have assumed the recently developed system capacities are accurate for the purposes of the EA, and new modeling will not be necessary. Model calculations may be reviewed at a high level if the wastewater generation basis established in the EA exceeds Master Plan estimates, or there are specific concerns that elements of the upstream collection and conveyance system may be undersized for projected future flows.

- Recent design and study information for the MBWWTF will be referenced to highlight the theoretical capacity of the current treatment process.

Flow design basis

- Using the Official Plan as a guide we will establish estimated average and peak wastewater generation rates corresponding to full build-out of lands zoned for development within the settlement boundary.
- Proposed per-capita residential wastewater generation rates, and generation rates for commercial/institutional properties and allowances for inflow-infiltration will be reviewed with the Municipality and then applied to the serviced area to develop a flow design basis.
- Phasing of build-out within the urban boundary will be considered to establish flow rates at intervals throughout the planning period.
- The potential flow generation from proposed development outside the Mount Brydges settlement will be estimated but not included in the total unless the municipality has specific plans to modify the urban growth boundary and Official Plan that can be documented to the MECP as part of the EA.

2.3.2.2 Technical Memorandum #2 (TM2) - Verification of Planning Details and Future Servicing Areas

TM2 will capture the outcome of the needs assessment and planning information review. It will summarize the assumed growth trajectory, serviced area and wastewater generation volumes that will be used as the basis for developing and evaluating the alternative design concepts. TM2 will be presented to council and elements of TM2 will be used to produce consultation materials for PIC #2.

2.3.2.3 PIC #2

PIC #2 will be held near the beginning of Phase 2. This PIC will be arranged similarly to PIC #1 and will:

- Summarize the population, flow and serviced area basis for the Class EA
- Provide information on the alternative solutions under consideration and key features (if known). It is expected that the overall alternatives to be evaluated will be known, but the specific site(s) for potential new treatment plant construction will not be established at this time.
- Provide an overview of the evaluation process planned to assess each alternative and solicit public input on the evaluation criteria to be used
- Describe the scope of planned and ongoing site investigations.

2.3.2.4 Site Investigations

A number of site investigations have been requested by the municipality to assess the suitability of the MBWWTF site for future expansion. Where possible studies will commence during Phase 1 and are planned to conclude prior to the end of Phase 2 and completion of TM#3. If a location other than the existing MBWWTF site is selected at the conclusion of Phase 2,

provisional costs will be reviewed with the municipality for conducting the necessary studies at the new site. Individual site investigation studies are described below:

Geotechnical and Hydrogeological Assessment

CIMA+ will carry out a desktop geotechnical review of the site. This review will be based on existing geotechnical information, including information relied upon for the recent facility process retrofit detailed design, as well as CIMA+'s knowledge and experience in the area. A Preliminary Hydrogeological Report will also be prepared in support of the project. The desktop Hydrogeological review will be completed based on a review of previous studies, if available and publicly available information. The investigation will include;

- Characterization of the local geological and hydrogeological conditions;
- Identification of potential groundwater receptors (supply wells, wetlands, surface water features, etc.);
- Recommendations for a monitoring program of groundwater levels and quality for before, during, and after construction.

The desktop geotechnical and hydrogeological reviews will provide an appropriate level of detail to complement other investigations at the MBWWTF site and contribute to the Class EA alternatives assessment. At this preliminary stage, the scope of a field program and specific findings it should include cannot be defined. The desktop review will support the development of the terms of reference (TOR) for a investigation programs that is appropriate for the site and aligned with known design needs.

Our provisional cost allowance for additional investigations may be used to complete a study for the preferred location. We will tailor the extent of field investigations (i.e. number of test pits or monitoring wells) to align with the available budget as required.

Natural Heritage Assessment

CIMA+ will complete a Natural Environment Assessment (NEA) for incorporation into the Environmental Study Report (ESR) for two preliminary locations, only one is currently identified. CIMA+ will review the existing background information to determine what Natural Heritage features are present within 120 m and 5 km of each site including Natural Heritage Systems, Wetlands, Watercourses, Valleylands, Significant Wildlife Habitat (SWH), and Species at Risk (SAR). CIMA+ will review the applicable municipal, provincial, and federal policies to determine the intersection between the project and the regulations.

There are three main tasks required to complete a NEAReport:

1. A review of background information;
2. Field investigations;
3. Natural Environment Assessment report, which will serve to document the existing conditions, provide the evaluation and analysis of impacts to natural features, and prepare avoidance and mitigation measures based on consultation with agencies (i.e., DFO, MECP).

Phase I Environmental Site Assessment (ESA)

CIMA+ will complete a Phase I ESA in general accordance with Ontario Regulation 153/04 (O.Reg 153/04), as amended, for the existing facility. It is assumed that the filing of a Record of Site Condition (RSC) will not be required for the Project. The overall objective of a Phase I ESA is

to assess if the property is subject to actual or potential contamination. This is done through the identification of Potential Contaminating Activities (PCA) on the property or within the study area (250 m radius of the property boundary) and identifying associated Areas of Potential Environmental Concern (APEC) on the property. The PCA and APEC are identified through the completion of a detailed assessment of the property by way of the completion of a records review, a site visit, interviews with persons knowledgeable of the site and an evaluation of information and reporting. Based on the findings of the assessment a Conceptual Site Model (CSM) for the property is developed with all identified PCA and APEC and recommendations for the investigation of identified APEC through the completion of a Phase II ESA, if required. The work will all be done under the supervision of a Qualified Person (QP) as defined in O. Reg 153/04.

Archaeological Assessment

Archaeological Research Associates (ARA) will complete a Stage 1 assessment of the MBWWTF site following Ministry of Citizenship and Multiculturalism (MCM) current Standards and Guidelines for Consultant Archaeologists (2011). This assessment will include historical document research and an in-person field visit. In the event areas of archaeological significance are identified, provisional costing has been developed for a Stage 2 assessment.

Geomorphic Erosion Hazard Limit Assessment

GEO Morphix will complete the Geomorphic Erosion Hazard Limit Assessment of the MBWWTF site. Based on an understanding of the existing site area it is assumed that subsurface investigations will not be required to develop suitable information from this study for the Class EA. Tasks will include:

- Review available background information and supporting documentation
- Delineate watercourse reaches based on a desktop assessment, as necessary
- Conduct field reconnaissance using standard, industry-accepted tools such as the rapid geomorphic assessment (RGA) and rapid stream assessment technique (RSAT) to evaluate existing instream and riparian conditions (i.e., evidence of ongoing channel processes, active erosion/deposition, or potential channel/slope instability)
- Delineate the erosion hazard for the watercourse located on the subject land using historical and recent aerial imagery, field observations, or empirical modelling approaches where required
- Prepare a technical report (with mapping) to document existing conditions and the results of the erosion hazard delineation assessment

2.3.2.5 Development of Alternative Solutions

The development of alternative solutions will proceed following the completion of the treatment facility needs assessment, in parallel with site investigations.

Site Selection

The site selection study will establish up to three (3) possible locations for a new treatment facility. Key factors in this assessment will include:

- Distance to current/planned users
- Location of outfall

- Practicality of inlet and discharge conveyance
- Land access/availability

It is expected that this exercise will include at least one workshop with external stakeholders (including developers) to understand locations where development is being contemplated so this may be incorporated in the site selection process. Based upon stakeholder input the number of sites under consideration for new facility construction may be reduced and potentially only one site will be evaluated in relation to other alternative solutions.

Development of Alternative Solution Features

Details of alternative solutions will be developed to aid in the evaluation process. These include:

- Estimated footprint and/or new property requirements
- Conceptual overview figures suitable for stakeholder and indigenous consultation.
- Conceptual level cost to a Class D level. Costing will be based on a representative technology approach for the alternative. For example, new treatment expansion may assume an a technology such as extended aeration with tertiary filtration and disinfection that would be expected to meet discharge limits . Refinement of the chosen technology approach will occur as part of Phase 3.
- Estimated lifecycle costing based capital costs and approximated operating costs from CIMA+'s professional experience
- Consideration for the alternatives' ability to serve the settlement area through full build out (year 2056).
- Potential to serve areas lands adjoining the Mount Brydges settlement outside the current growth boundary

Alternative Evaluation Matrix

An evaluation matrix will be developed and reviewed with the municipality prior to completing the alternative solution evaluation. Evaluation matrix categories are expected to include:

- Natural Environment Impacts
- Socio/Cultural Impacts
- Technical Suitability
- Costs

Individual criteria will be proposed under each category, with input from stakeholder consultation and the Municipality. A workshop will be held with the Municipality to confirm criteria and the evaluation scoring approach.

2.3.2.6 Technical Memorandum #3 (TM3) - Identification and Evaluation of Alternative Solutions

TM3 will compile the results of site investigations, the alternatives selection process and present the evaluation outcomes. Following review by municipal staff, TM3 will be presented to council and elements of TM3 will be used to produce consultation materials for PIC #3.

2.3.2.7 PIC #3

PIC #3 will be held at the conclusion of Phase 2. This PIC will:

- Summarize outcomes of site investigations
- Summarize the site selection study
- Describe the Alternative Solutions developed
- Review the evaluation approach and criteria
- Present the evaluation results and preferred alternative solution to carry forward into Stage 3.

2.3.3 Phase 3: Identification and Evaluation of Alternative Design Concepts

Phase 3 of the EA will refine selected Alternative Solution and develop alternative design concepts for evaluation. Alternative design concepts may include features such as the type of biological treatment technology recommended for use at the facility at the design flow rate and location established in Phase 2. Our Phase 3 tasks are identified in the sections below.

2.3.3.1 Alternative Design Concept Development and Evaluation

Alternative Design Concepts will be developed at a conceptual level with sufficient detail to describe technical features to project stakeholders, and complete an evaluation process. We have assumed up to three (3) alternative design concepts will be identified. Each design concept will be identified by its key distinguishing feature and may be comprised of multiple unique process components. We do not intend to independently review and evaluate each process component (e.g. headworks, biological treatment, tertiary treatment, disinfection etc.) independently as part of this exercise. Key features of our design concepts will include:

- Identification of key features
- Conceptual level design required to establish the size of key components such as motorized equipment and tanks
- Overview figures illustrating function and footprint requirements
- Performance features and operating considerations
- Costs, developed with a combination of vendor quotations, established estimating guidelines and CIMA+'s experience

The CIMA+ team will develop an evaluation matrix for alternative design concepts for review by the Municipality. This will be adapted from the matrix developed in Phase 2, with adjustments to individual evaluation criteria to reflect the expected difference between Alternative Design Concepts under the preferred Alternative Solution

2.3.3.2 Project Financing and Delivery Reviews

Project Funding and Financing

CIMA+ will work with Watson Associates in the identification and evaluation of financing options for the anticipated capital and operating costs related to the study. This will include:

- Assessment of the short-term and long-term funding impacts

- Evaluation of capital projects to determine any growth-related components for development charge (D.C.) funding eligibility,
- Potential funding sources for the non-growth component, and suggestions to update the Municipality's current D.C. policies (e.g., the local service policy, D.C. by-law, etc.) to support the recommended financing of the capital program. Up to three financing options will be considered.

Watson and CIMA+ will also work with Municipal staff to identify potential alternative funding methods such as D.C. credit agreements, front ending agreements, landowner cost sharing agreements, area specific charges, and the use of the Municipal Act.

The potential impact of the alternatives to the Municipality's water and wastewater rates will be assessed based on the costs of each alternative financing option.

Construction Procurement

CIMA+ is experienced in alternative delivery models for municipal infrastructure and will discuss the potential benefits and disadvantages of approaches such as Design-Build compared to traditional Design-Bid-Build procurement.

2.3.3.3 Technical Memorandum #4 (TM4) – Alternative Design Concepts for the Preferred Solution

TM4 will include detailed descriptions of each alternative, present the evaluation matrix for the alternatives selection process and present the evaluation outcomes. Following review by municipal staff, TM4 will be presented to council. Council review at this stage will allow the project funding and financing elements of the project to be discussed prior to presenting a final preferred concept.

2.3.3.4 PIC #4

PIC #4 will be held at the conclusion of Phase 3. This PIC will follow the same format as the other PIC events, and will:

- Present the alternative design concepts developed based on the selected alternative solution
- Review the evaluation approach and criteria
- Present the evaluation results and preferred alternative design concept.
- Describe funding and procurement approaches that may be considered in implementing the solution.
- Provide an opportunity for participants to ask questions, clarify details, confirm findings, and provide input to refine the preferred alternative design concept and potential implementation approaches.

2.3.4 Phase 4: Environmental Study Report

The Environmental Study Report (ESR) will provide a concise overview of the work done in Phases 1-3 of the Class EA and detail impacts and mitigation approaches associated with the preferred alternative design concept. Appendix material will include individual technical memos and study reports, and consultation documents.

The MECP, at their discretion, may request an ESR be submitted for a technical review prior to posting for an official 30-day public review. Given the ongoing scrutiny of the MBWWTF due to effluent compliance challenges, we believe this will be requested and have accounted for this task in our project schedule. We suggest the ESR be submitted to the MECP after draft review by municipal staff, but before finalization and presentation to Council.

Following approval of the ESR text, a notice of commencement will be issued, and the ESR will be placed on 30-day public review and filed with the MECP.

2.3.5 Provisional Items

The RFP has identified a number of provisional items above and beyond the core project scope described above. CIMA+ has provided provisional effort for these tasks in our submission, however in many cases the scope of requested tasks is dependent upon the completion of initial studies or site investigations and cannot be accurately determined at this time.

The effort and costs of any provisional work requested by the Municipality during the EA must be reviewed and reconfirmed by CIMA+ at that time.

3 Project Team Qualifications

For this opportunity, we have assembled a highly skilled and experienced cross-functional team with extensive industry expertise in wastewater treatment facilities. Our team brings the necessary skills, technical proficiency, and capacity to successfully meet project objectives and deliver a high-quality outcome.

This section outlines the key team members proposed for this project, highlighting experience shall be on similar project and in similar roles. Additionally, resumes for all the team member listed in the organizational chart have been included in **Appendix A**.

QA/QC LEAD | SANDRA RODRIGUEZ, P.ENG

Sandra is a Director in CIMA's Water and Wastewater Infrastructure Group with **20 years of experience as a lead engineer / project manager, leading municipal water & wastewater Environmental Assessments for a variety of municipal infrastructure projects in Ontario**. Her areas of expertise include provincial environmental assessments, master plans, business cases, servicing studies, stakeholder consultation and engagement, and report preparation.

Sandra has completed over 30 Municipal Class EA studies and Master Planning projects in the Regions of Peel, Niagara, Durham, Halton, Waterloo, Prince Edward County, City of Hamilton, the Town of New Tecumseth, Municipality of Chatham-Kent and the County of Brant. She has extensive experience managing multi-disciplined technical and non-technical teams, a deep understanding of the municipal planning process, and the regulatory framework and applicable legislation. Sandra's versatility with planning legislation includes a deep insight of the MECP proposal to modernize the current MCEA process for municipal infrastructure.

Through her many projects, Sandra has successfully developed and implemented stakeholder consultation and engagement programs comprising an array of audiences, including technical advisory and steering committees, indigenous groups, public officials, general public, and regulatory and approval agencies.

PROJECT DIRECTOR | KELLY FRENSCH, M.ENG., P.ENG

Kelly is CIMA+ Executive Director of Water in Southwestern Ontario, she has over 17 year of experience in in the preparation of conceptual, preliminary, detailed design, and contract documents for wastewater treatment plants. Kelly has been involved in many EAs including lead roles the Spring Valley SPS, Greenway and Adelaide WWTP Flood Protection, and Burke Water Treatment Class EAs. Following an EA to bring municipal servicing to the remaining urban boundary in North West Waterloo, Kelly was the project manager retained by the City to work with several active developers to implement two pump stations, 3.5km of watermain, two trenchless creek crossings and new roads within culturally and historically sensitive lands. Demonstrating that she not only knows the EA process but fully appreciates how EA decisions impact future implementation.

PROJECT MANAGER | BRAM BONTJE, P.ENG., B.SC.

Bram is a senior project manager with over 15 years of experience specializing in municipal wastewater treatment design, project management and environmental approvals. He is passionate about developing technical approaches to solving complex wastewater servicing challenges with a particular interest in developing strategies from the early planning stage in a way that appropriately engages stakeholders, is technically sound and sets municipalities up for long term success. His relevant experience includes key project management and public-facing technical leadership roles on several recent municipal wastewater servicing projects including the Region of Waterloo Biosolids Master Plan, Parkhill Wastewater Treatment Class EA, Shedden and Fingal Master Servicing Plan, Dutton Dunwich WWTP Class EA and the ongoing East Brampton servicing Class EA. Based out of CIMA+ London office and currently leading the Mount Bridges process assessment, Bram is the ideal project manger for this assignment.

PROJECT COORDINATOR | DAVID KOVAKS, M.A.SC., P.ENG.

David Kovacs is a licensed Professional Engineer (P.Eng.) in Ontario with over seven years of combined academic and professional experience in municipal water and wastewater infrastructure. His excellent communication, attention to detail and ability to multiple tasks in parallel make him the ideal candidate for this project. He brings a robust background in supporting environmental assessments and engineering design for municipal wastewater systems, stemming from both consulting and academic research settings. He is currently supporting the complex Peel Groundwater System Master Plan, and Guelph WRRC Tertiary and UV Upgrades project.

LEAD LAND USE PLANNER AND INDIGENOUS RELATIONS ADVISOR | FERENAZ RAHEEM, RPP, MCIP

Ferenaz Raheem is a Registered Professional Planner with over 15 years of municipal sector experience, specializing in Environmental Assessments (EAs), infrastructure development, and stakeholder engagement. She has led transportation, structural, and infrastructure-related EAs at the federal, provincial, and municipal levels, coordinating complex assessments involving fisheries, socio-economic, land use, natural heritage, hydrogeological, and archaeological considerations. Her work includes developing mitigation strategies, securing permits and approvals, and ensuring compliance with regulatory frameworks. Ferenaz brings strong expertise in project management, technical reporting, training, and quality assurance, and has successfully overseen the implementation of Environmental Management Systems for major

Design-Build initiatives. As a Certified Facilitator, Public Engagement Specialist, and active member of the Canadian Institute of Planners, she has designed and executed extensive consultation programs at national, regional, local, and Indigenous levels.

LEAD HYDROGEOLOGIST | KAREN GREER, M.SC., P.GEO.

Ms. Karen Greer is a Partner, Director and Lead Hydrogeologist with over 20 years of technical and project management experience working extensively on projects detailing the hydrogeological properties and disposal and transport of contaminants within the subsurface. Client sectors include federal, provincial, municipal governments, first nations, large industry, commercial, and private enterprises. She routinely manages and acts in a senior technical lead on projects relating to Environmental Site Assessments (ESA), contaminated site remediation, hydrogeological investigations as well as permitting and approvals. Her background, experience and understanding of physical and chemical hydrogeology allows her to take on the role as a senior technical professional. Ms. Greer is Professional Geoscientist with the Professional Geoscientists of Ontario (P.Geo.), a Qualified Person (QP) as per Ontario Regulation 153/04 (QPESA) as well as a QP groundwater in Ontario.

PERMITS & APPROVALS LEAD | KAI MARKVORSEN, B.SC.

Mr. Kai Markvorsen has extensive experience with federal and provincial Environmental Assessment processes for resource development. His expertise includes Class Environmental Assessments and planning requirements under the provincial Environmental Assessment Act and Federal Impact Assessment Act screenings and planning requirements. He has also managed permitting requirements under the Planning Act, Lakes and Rivers Improvement Act, Environmental Protection Act, and the Ontario Water Resources Act and their associated regulations for many construction and resource development projects, including waterpower and aggregate extraction. He also has a background in environmental site assessment (ESA), natural heritage assessments (NHA) and environmental impact statements (EIS) as an Environmental Project Manager for private and government clients.

PUBLIC AND STAKEHOLDER ENGAGEMENT LEAD | BRANDON QUIGLEY, MES, RPP, MCIP

Brandon Quigley is a CIMA+ Project Manager registered professional planner with nearly a decade of experience in leading and coordinating sustainable and multi-modal mobility projects, providing planning and policy input and analysis, and additional years of experience in communications, education, and facilitation. His areas of expertise include engagement and facilitation, public and stakeholder consultation and education, active transportation infrastructure planning, monitoring, and program management, and transportation demand management programming and policy development. He also has experience in comprehensive transportation master planning and municipal policy development.

WASTEWATER TREATMENT PROCESS ENGINEER | WARREN SAINT, P.ENG.

Warren has over 37 years of professional experience in the design, construction, commissioning, and operation of water and wastewater treatment facilities. Warren has been involved in all aspects of project work: master planning, process and detailed mechanical design, project management, contract administration, supervision of construction, commissioning and facilities operation. In addition to acting as a senior project advisor and

senior QA/QC reviewer, Warren has a well-earned reputation for successfully managing multidisciplinary, multi-firm teams, and for managing construction phasing and sequencing to achieve client and project quality, budgetary, and scheduling objectives. He was also led process engineer expertise for the Guelph Wastewater Treatment Master Plan (Schedule C class EA) and Woodstock WWTP Expansion EA.

BRADLEY YOUNG, PHD., P.ENG. | SENIOR PROCESS ENGINEER

Bradley Young is an accomplished environmental engineer with over 15 years of expertise in advanced wastewater process design, planning, and optimization for municipal and industrial clients across Canada. With a Ph.D. in Environmental Engineering and deep technical experience in biological treatment, Bradley has led numerous projects requiring innovative solutions for nutrient removal, biosolids management, and plant expansion. His portfolio includes EA and Master Planning assignments, such as the Wellington and Sunderland Schedule C Class EAs, where he served as lead process engineer. His practical knowledge of integrating advanced technologies into existing infrastructure aligns with the RFP's focus on maximizing treatment performance, planning for future growth, and supporting sustainable, long-term servicing strategies. Bradley has current knowledge of the MBWWTF through his involvement with the ongoing process assessment project.

Bradley will be well supported in his role by several process-focused professionals including Na Qin (Ph.D.), Peter Brooks (M.Eng., EIT), and Dodge Yu (M.A.Sc., P.Eng.) who bring a detailed understanding of both the liquid treatment train and Region facilities.

REBECCA PRINGLEMEIR, P. ENG. | STRUCTURAL LEAD

Rebecca Pringlemeir is a seasoned structural engineer with over two decades of experience specializing in municipal water and wastewater infrastructure. Her work includes structural design, condition assessments, and constructability reviews for complex facilities, including major treatment plant upgrades and expansions. Rebecca's deep familiarity with water-retaining structures, structural retrofits, and design QA/QC makes her an ideal lead for infrastructure projects involving aging assets and new builds alike. Her recent roles on projects such as the Waterloo WWTP Aeration Upgrades and G.E. Booth New Plant 1 position her well to address the structural challenges of long-term wastewater servicing and future growth planning.

TIM BARICHELLO, P. ENG. | ELECTRICAL LEAD

Tim Barichello brings over 25 years of electrical engineering expertise in municipal infrastructure, with extensive experience in power distribution, SCADA systems, and I&C design for wastewater treatment plants and pumping stations. As a Partner and Director at CIMA+, Tim is known for his ability to deliver robust and adaptable electrical systems for evolving facilities. His involvement in major undertakings like the G.E. Booth WWTP New Plant 1 Program and Greenway WWTP Flood Protection demonstrates his capacity to design and lead complex electrical systems that support both immediate upgrades and scalable long-term solutions.

STUART WINCHESTER, P. ENG. | CIVIL LEAD

Stuart Winchester is a civil engineering leader with more than 35 years of experience guiding the planning and delivery of municipal infrastructure across Ontario. He is adept at the full project lifecycle, from Class EA studies through to detailed design and construction, particularly for wastewater collection systems, trunk sewers, and pumping stations. Stuart's past leadership

on projects such as the Cambridge East Side Lands Interim Pumping Station and the Mapleton Water and Wastewater Servicing Master Plan reflects his strength in balancing community growth needs with practical design and stakeholder engagement, a key asset for an EA focused on long-term wastewater servicing for Mount Brydges.

3.1 Personnel Commitment

Recognising that continuity and commitment of personnel is a key component to an efficient and effective project, CIMA+ acknowledges that it is important to have identified key team members available throughout the duration of any agreement resulting from this RFP in accordance with the provided time-task matrix. Written approval will be received from the Municipality of Strathroy-Caradoc's Project Manager prior to the replacement or substitution of any personnel for any reason - these substituted personnel will be of equal or greater level of experience.

4 Project Reference

Project Experience #1 | South Peel Wastewater Treatment Solutions



Project Description:

The South Peel Wastewater Treatment Solutions project, a joint project led by CIMA+, Black & Veatch and GM BluePlan (led by Laurie Boyce our communications & engagement advisor), involved two Schedule "C" Class Environmental Assessments (EAs) and conceptual designs for capacity expansions at the Clarkson and G.E. Booth Water Resource Recovery Facilities (WRRFs) in the Region

CLIENT

Region of Peel
Cindy Kambeitz, PMP, PMI-RMP
P: 905-791-7800, ext. 5040 |
cindy.kambeitz@peelregion.ca

PROJECT DATES

2020-2024

Project Experience #1 | South Peel Wastewater Treatment Solutions

of Peel. The project developed an integrated, region-wide strategy for wastewater and biosolids management. It included capacity assessments, evaluation of treatment technologies, and selection of preferred design concepts for both facilities.

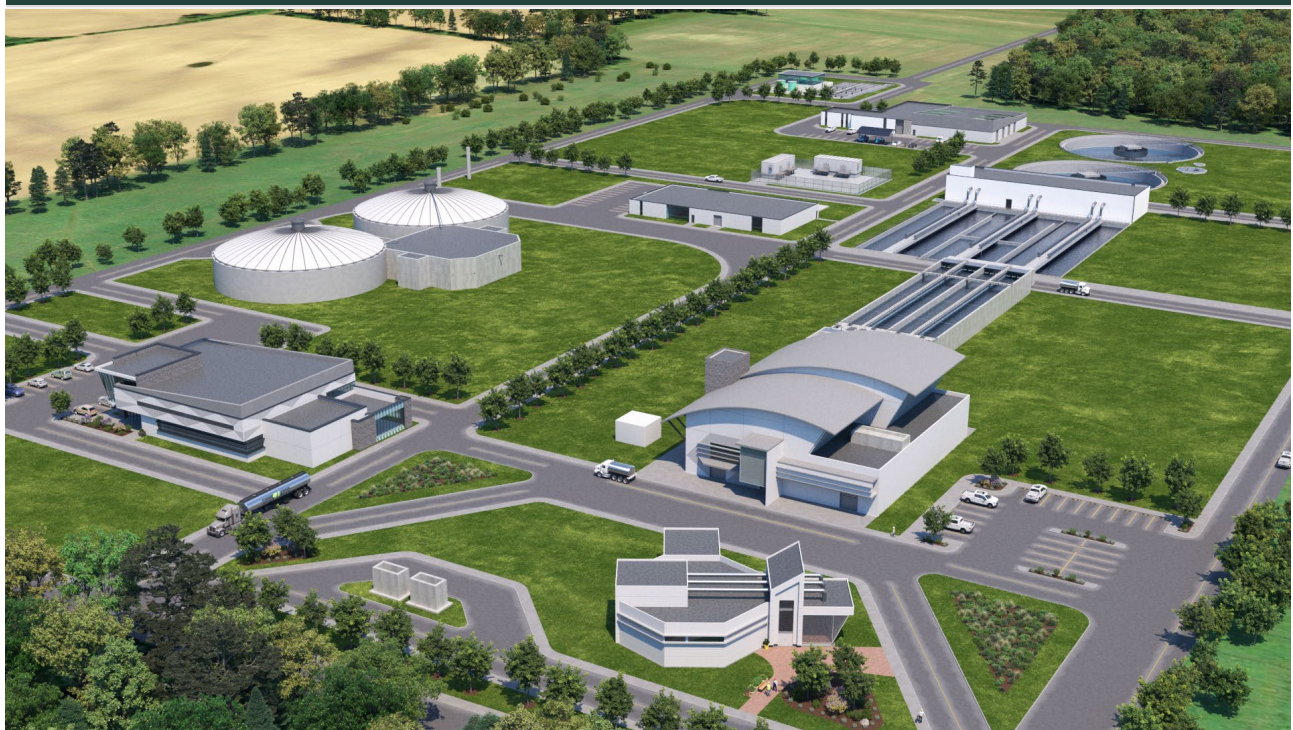
At Clarkson WRRF, the solution focused on expanding capacity from 350 MLD to 500 MLD using a Sidestream Enhanced Biological Phosphorus Removal (S2EBPR) process—selected for its sustainability benefits including lower chemical use and reduced greenhouse gas emissions. For G.E. Booth WRRF, the expansion to 550 MLD included implementation of Real Time Control (RTC) in the collection system to manage peak flows, along with upgrades to CAS processes and new UV disinfection.

ESTIMATED CONSTRUCTION VALUE

\$730,000,000 (Clarkson WRRF)

ESTIMATED FEES

\$750,000 (Clarkson WRRF)

Project Experience #2 | South Niagara Falls Wastewater Treatment Plant**Project Description:**

The South Niagara Falls Wastewater Treatment Plant (WWTP) project involved a comprehensive Schedule C Class Environmental Assessment (EA) to develop a new regional treatment facility to support multiple municipalities within the Region of Niagara. Led by GM BluePlan with CIMA+ as the

CLIENT

Region of Niagara | Tony Cimino, Associate Director
Cell: 905-321-1822 | Email: tony.cimino@niagararegion.ca

Project Experience #2 | South Niagara Falls Wastewater Treatment Plant

process engineering lead, the project included technology selection, effluent limits verification, site evaluation, and the conceptual design of all unit processes.

The project addressed long-term regional growth, wet weather flow management, high-strength waste handling, and future system adaptability. Technologies considered included Conventional Activated Sludge (CAS), Enhanced Biological Phosphorus Removal (EBPR), and Biological Aerated Filters (BAF), with provisions for future Membrane Aerated Biofilm Reactor (MABR) and tertiary treatment. Sustainability was a key objective, with emphasis on low-energy design, gravity conveyance, and energy recovery options such as Combined Heat and Power (CHP) or Renewable Natural Gas (RNG) integration.

PROJECT DATES

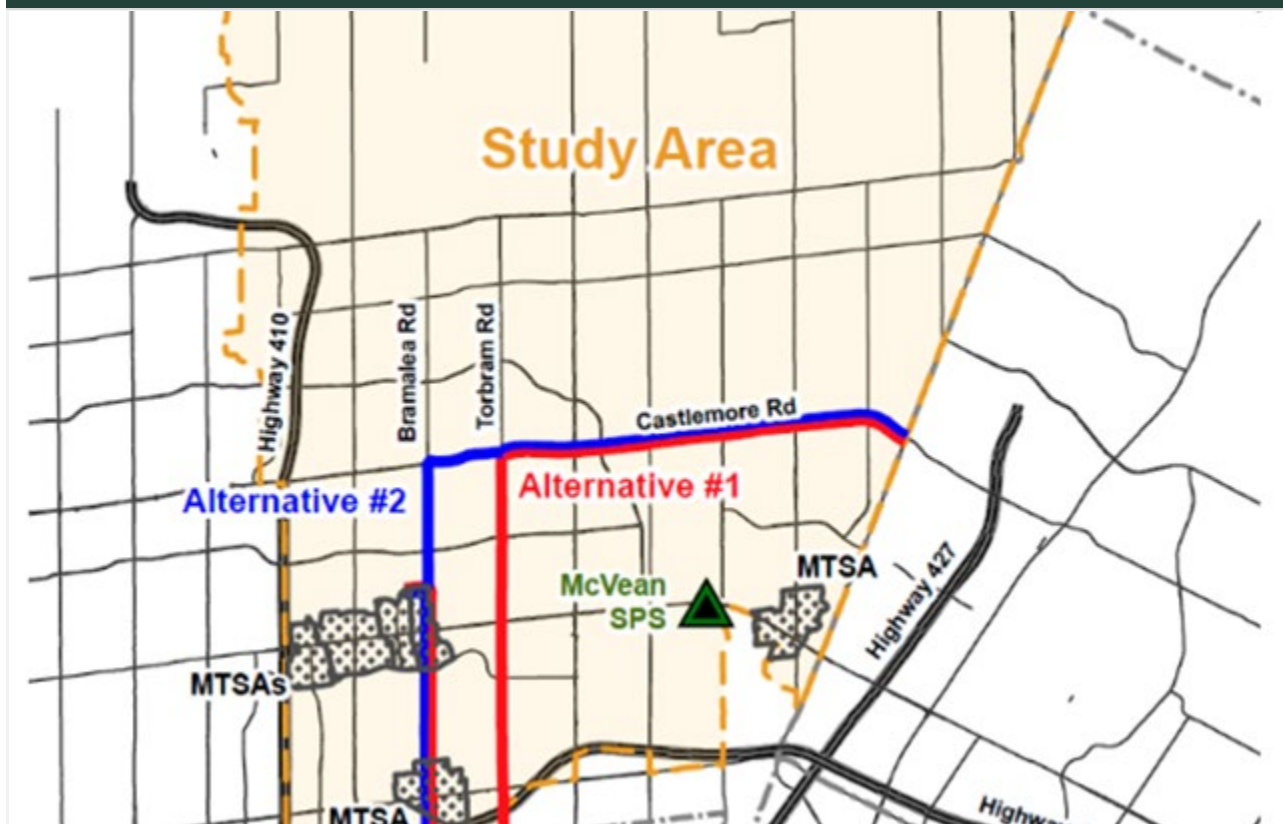
2018-2023

**EST. CONSTRUCTION
VALUE**

\$120,000,000

FEES

\$500,000

Project Experience #3 | East Brampton Wastewater Servicing Improvements Class EA**Project Description:**

The Upper East Brampton Wastewater Capacity Improvements project is critical for the Region of Peel in light of the steep growth projected in Upper East

CLIENT

Project Experience #3 | East Brampton Wastewater Servicing Improvements Class EA

Brampton and the Bramalea MTSA areas and the current capacity limitations at the McVean Sewage Pump Station (firm capacity 1,400 L/s), the largest SPS in the Region. The project aims to implement a new deep trunk gravity sewer system that spans approximately 22 km, reducing reliance on energy-intensive pumping infrastructure and ensuring long-term serviceability.

The key challenge lies in constructing a 22+ km deep trunk sewer through a dense urban setting intersecting major infrastructure like Highway 407, creeks, rail corridors, and sensitive community sites (hospitals, schools, places of worship). CIMA+ is leveraging its ISO-certified project management practices, a dedicated multi-disciplinary team, and early agency/stakeholder engagement to ensure timely delivery. Bram Bontje is serving as the EA and consultation lead for this ongoing project.

Region of Peel | Gareth Clemens,
Project Manager - Environmental
Assessments and Studies
P: 437-788-6195
gareth.clemens@peelregion.ca

PROJECT DATES

Start: 02-2025

End: 12-2026

Class EA Completion: Expected July 2026

Preliminary Design Completion:
December 2026

CONSTRUCTION VALUE

\$1B

FEES

Original: \$2,748,570

Actual: On budget

The project sheets for the project references along with additional relevant project experience have been included in **Appendix B**.

5 Schedule & Time-Task Matrix

Our team has the available technical resources to begin this assignment immediately following approval of this proposal. Our Project Manager is available immediately to meet with the Municipality and can mobilize the project team to suit the scope and schedule for the project. A detailed Gantt chart illustrating our preliminary schedule is included in **Appendix C**. Our schedule has been prepared in conjunction with our Time-Task Matrix, **Appendix D**, to reflect the scope described in the RFP.