



REQUEST FOR PROPOSALS (RFP)

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WATER AND WASTEWATER FACILITIES OPERATION AND
MAINTENANCE SERVICES

The Corporation of the Village of Merrickville-Wolford

RFP Posted: October 18, 2023

Mandatory site visit date: Friday, November 3, at 9:00 am

Electronic Proposal submission close date: Monday, November 27, at 3:00 pm local time.

Village Contacts:

Brad Cole, Manager of Operations at publicworks@merrickville-wolford.ca and,

Kirsten Rahm, Treasurer at finance@merrickville-wolford.ca

SUMMARY INFORMATION

<p>Type of Contract:</p>	<p>The Village of Merrickville-Wolford is requesting proposals from qualified firms to provide operations, maintenance, and management services for its Water and Wastewater facilities.</p>
<p>Proposal Submission:</p>	<p>Proponents should divide their proposals into two separate submissions:</p> <ol style="list-style-type: none"> 1. Proposal Part A – Technical Submission. This submission should contain all technical information in relation to the requirements 2. Proposal Part B – Pricing Submission. This submission should contain all pricing information in relation to the requirements. <p>Submissions will only be accepted electronically by emailing Brad Cole, Manager of Operations at publicworks@merrickville-wolford.ca and, Kirsten Rahm, Treasurer at finance@merrickville-wolford.ca (Village Contacts)</p> <p>Proponents should:</p> <ol style="list-style-type: none"> 1. Download the Request for Proposals (RFP) from MERX or Village website 2. Monitor MERX and/or Village website for any addenda. 3. Register for the mandatory site visit by emailing <u>both</u> Village contacts. 4. Electronically submit the Part A – Technical Submission and Part B – Pricing Submission separately to <u>both</u> Village contacts <p>Submissions by any other means, including hardcopy and fax will be rejected.</p>

RFP Schedule Summary:	-----	
	The receipt of submissions will be based as per the time the electronic system determines it has received the submissions, regardless of when it was sent by the proponent. Any submissions received past the closing date and time will not be accepted.	
	RFP Posted:	October 18, 2023
	Mandatory Site Visit:	November 3, 2023, at 9:00am
	Last day for questions:	November 17, 2023, at 10:00am
	Proposal Submission Close:	November 27, 2023, at 3:00pm
RFP Award:	To be determined	
Proposal Acceptance:	-----	
	<ol style="list-style-type: none"> 1. The awarding of this RFP is subject to the approval of the Village of Merrickville-Wolford Council 2. The Village reserves the right to reject any or all Proposals received. 3. Lowest priced Proposal or any Proposal not necessarily accepted. 	



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SECTION 1: INSTRUCTIONS TO PROPONENTS

1.1 Invitation for Proposals

The Village of Merrickville-Wolford (the Village) is issuing a Request for Proposal (RFP) inviting proposals for services (the Proposal) from qualified firms (the Proponent) to operate, maintain and manage its Water and Wastewater facilities and their related assets (collectively the Services) under a Water and Wastewater Services Agreement contract (the Agreement) for an initial five (5) year term with an option for up to an additional five (5) year term at the sole discretion of the Village and subject to acceptance by the successful Proponent. The initial term will run from January 1, 2025, to December 31, 2029. The initial transitional period will be initiated on September 1, 2024.

1.2 Mandatory Site Visit

A site visit will be held on Friday, November 3, 2023, starting at 9:00 a.m. from the Municipal Offices, 317 Brock Street West, Merrickville ON., and is mandatory for all Proponents. Failure to attend the site visit will disqualify a Proponent from further consideration in the procurement process and any Proposal received from a disqualified proponent will be rejected.

Proponents must register for the site visit via email with publicworks@merrickville-wolford.ca by October 27, 2023, at 10:00 a.m. An itinerary will be sent out upon registration.

Any questions arising from the site visit can be sent to both Village contacts in accordance with section 1.4.4 below and any responses deemed necessary or appropriate will be issued as Addenda through MERX and the Village website.

1.3 Bidding Process

Submissions signed, executed, and dated will be received by the Village before the closing deadline for the electronic submission of Monday, November 27, 2023, at 3:00 p.m. local time. Since electronic transmission of submissions can be delayed due to issues such as file transfer size or transmission speed, Proponents are advised to allow sufficient time for the upload of submissions.

The Village will send an email to the Proponent confirming that their submission was successfully received.

1.3.1 Award Subject to Village Approval

Proposals received after the submission closing deadline will not be considered and will remain unopened. Proponents should note that in lieu of a public RFP opening, the total Proposal amounts will be summarized and posted to the Village's website. Proponents should note that the pricing information read out at the Proposal opening is PRELIMINARY in nature only and should not be construed as an indication of which Proponent is being awarded the contract. All documentation is subject to review for mathematical accuracies, compliance with the specifications, and compliance with the terms and conditions of the RFP, the completion of which will ultimately determine the successful Proponent. RFP award is subject to Village Council Approval.

1.3.2 Proposal Preparation Cost

Proponents agree to prepare and submit Proposals at their own cost. The Village is not liable in any way to pay costs of any kind or nature whatsoever that may be incurred by a Proponent or any third parties in the RFP process relating to the Proposal submission.

If the RFP process is withdrawn or cancelled by the Village at any time, the Village shall not be liable for any Proponent's, losses, damages, or expenses incurred in the preparation and submission of a response to this RFP.

All costs will be the Proponents' sole responsibility.

1.3.3 Village Rights and Disclaimers

The Village, in its sole discretion, reserves the following rights:

- To reject any and all responses, proposals or information received pursuant to this RFP;
- To cancel this RFP with or without the substitution of another RFP;
- To issue additional requests for information or for proposals;
- To take any action affecting the RFP, the RFP process, the services or facilities subject to this RFP

that would be in the best interest of the Village;

- To consider any alternative approach or proposal that meets the basic needs of the Village;
- To require one or more Proponents to supplement, clarify or provide additional information for the Village to evaluate any proposal submitted;
- To waive any defect or technicality in any proposal received;
- To require that all submissions made pursuant to this RFP shall be in accordance with the laws of Ontario and Canada;
- The Village is under no obligation to confirm whether any Proponent's submission(s) are completed or to request a Proponent to provide additional detail or clarification of any material provided pursuant to this RFP process;
- To negotiate with any Proponent, the final terms, and conditions of the draft Service Agreement.

1.3.4 *Amendments*

Amendments to a submitted Proposal will be permitted if received by the Village prior to the submission closing time and if endorsed by the same party or parties who signed and sealed the submitted Proposal. A submitted Proposal amendment will state any changes in service commitment and/or any amount(s) to be added to or deducted from the Part B - Pricing Submission.

1.3.5 *Withdrawals*

A Proponent may withdraw its submission at any time prior to the submission closing deadline by providing notice to the Village by emailing both Village contacts. The withdrawal will be in effect as of the time the notice is received by the Village.

1.3.6 *Mode of Submission*

Proposals, amendments, and withdrawals submitted by any other manner than by emailing both Village contacts whether by telephone, facsimile, or hardcopy will not be considered by the Village.

1.3.7 *Procurement Process*

Proposals will be called, received, evaluated, accepted, and processed in accordance with the

Village's Purchasing Policy (attached as Schedule C). By submitting a Proposal each Proponent agrees to be bound by the terms and conditions of that Policy and those procedures and any amendments to them, as fully as if it were reproduced and attached to this RFP.

1.3.8 *Time Extension*

The Village may, by addendum, extend the submission closing deadline or any other scheduled dates relating to this RFP.

1.3.9 *Public Disclosure*

The public disclosure of the contents of a proposal submitted in response to this RFP is governed by the regulations as outlined in the Municipal Freedom of Information and Protection of Privacy Act in the Province of Ontario.

1.3.10 *Property of the Village*

All requirements, designs, documentation, plans, and other information obtained from the Village by the Proponents in connection with this RFP are the property of the Village and must be treated as confidential and not used for any other purpose than replying to this RFP and the fulfillment of any subsequent contract.

1.4 RFP Documents

1.4.1 *Availability*

The RFP may be obtained as of the posting date of October 18, 2023, on:

- o Village of Merrickville-Wolford website:
[Tenders, RFP – Office & Council - The Village of Merrickville-Wolford](#)

OR

- o MERX: <https://www.merx.com/>

1.4.2 *Errors, Omissions or Discrepancies in RFP Documents*

Upon receipt of the RFP, Proponents will verify that the documents are complete. If the RFP is incomplete or upon finding any discrepancies, errors or omissions in the RFP, including those arising following the mandatory site visit, Proponents will immediately notify the Village by emailing both Village contacts in accordance with section 1.4.4 below.

The Village will not be held liable for any discrepancies, errors, or omissions in any part of the RFP process. While the Village has used considerable efforts to ensure an accurate representation of information throughout the RFP process, the information contained therein is supplied solely as a guideline for Proponents and no warranty as to its accuracy, or comprehensiveness is given by the Village.

1.4.3 *Examination of RFP for Service Delivery Requirements*

Proponents are solely responsible for conducting their own due diligence for the preparation of their Proposal submission to this RFP. Therefore, in addition to attending the mandatory site visit, the Proponent must satisfy themselves by examination of the RFP documents in relation to the conditions existing or likely to exist in connection with the proposal award and as to the service delivery requirements of the RFP.

As such the Pricing Submission must comprise the following:

- Fixed Price for Core Services
- Fully burdened labour rates by role as specified.

Each component of the Pricing Submission must include all the costs specified in this RFP as necessary to deliver those services.

There will be no consideration of any claim after the submission of a Proposal that there is a misunderstanding with respect to the conditions or service scope imposed by this RFP. No claims for extra work will be considered. Optional Services estimated by the Proponent must be authorized in writing by the Village prior to the commencement of a final Water and Wastewater Services Agreement.

The Proponent must obtain any information or clarification they require, including on service delivery requirements, prior to the submission deadline in accordance with section 1.4.4 below.

1.4.4 Queries from Proponents and Addenda

The Village does not intend to modify the project described herein or the scope of the services. Notwithstanding this intention, the Village reserves the right to modify, amend, substitute, or supplement any part of this RFP at any time by addenda, or notice in writing to the Proponents. The Village will provide Proponents with sufficient time to respond to such modifications including, without limitation, the opportunity to make necessary revisions to their respective submissions.

All inquiries from Proponents regarding the RFP including those arising from the mandatory site visit, the RFP, and/or the service requirements must be in writing by email and directed to both Village contacts and received by the Village by the question deadline of November 17, 2023, at 10:00 am.

When a response is deemed necessary or desirable by the Village, including in order to answer queries properly submitted by Proponents. Verbal answers given by the Village to queries are only binding when confirmed by a posted written addendum.

Addenda may be issued by the Village by posting them on the Village website or MERX.

All addenda become part of the RFP and it is the Proponent's sole responsibility to access and download any changes or addenda to this RFP opportunity. Proponents will reflect all addenda in their Technical Submission and include all costs of all addenda in the Pricing Submission. Any Proposals received that do not include posted addenda and/or change notices may be rejected.

1.5 Proposal Submissions

Proponents will be solely responsible for the delivery of their proposal submissions in the manner and time prescribed.

Both the Technical and Pricing Submissions of the Proposal (see Sections 2.10 and 2.11) must be

fully completed with all required information, including all applicable blank spaces in the cover sheets for each, and then signed under seal by a duly authorized representative of the Proponent, dated and submitted in a clear and legible manner.

Proposal submissions and any attachments that are unsigned, improperly signed or sealed, conditional, illegible, obscured, improperly prepared, or contain arithmetical errors, erasures, alterations, or irregularities of any kind may, at the discretion of the Village, be declared invalid and rejected.

If a joint venture is responding to the Request for Proposal, the Proposal Package shall be submitted by a Lead Proponent and the others named as subcontractors.

The Village retains the separate right to accept or waive irregularities in the Proposal submissions and any attachments if, in the Village's sole discretion, such irregularities are of a minor or technical nature or, where practicable to do so, the Village may, as a condition of Proposal acceptance, request the Proponent to correct a minor or technical irregularity with no change to the Pricing Submission.

The determination of what is, or is not, a minor or technical irregularity, the determination of whether to accept, waive, or require correction of an irregularity, and the final determination of the validity of a Pricing Submission, will be at the Village's sole and absolute discretion.

1.6 Proposal Submission Duration and Clarification

1.6.1 *Duration of Proposal Submissions*

Proposal Submissions will remain open to acceptance and will be irrevocable for a period of six (6) months (180) days after the Proposal submission closing time.

1.6.2 *Clarification of Proposal Submissions by the Village*

The Village may, at any time following the RFP closing time, request that any Proponent clarify its proposal submissions by submitting additional information clarifying any matters contained in its

proposal submissions and require the relevant Proponent's acknowledgement of the accuracy of that interpretation.

The Proponent will submit such clarifications in writing by email to both Village contacts within three (3) working days following receipt of such a request from the Village, or within such shorter time as the Village may require, and in a form satisfactory to the Village.

The additional information accepted by the Village and written interpretations which have been acknowledged by Proponents will be considered to form part of the Proposals of those Proponents.

The right to request clarification of Proposals by the Village as provided herein is within the sole, complete and unfettered discretion of the Village and is for the Village's sole benefit and may or may not be exercised by the Village at any time and in respect to any or all Proposals. Where in the opinion of the Village the Proposal is ambiguous, incomplete, deficient, or otherwise not acceptable in any aspect, the Village may reject a Proposal either before or after seeking a clarification under this section.

The seeking of a clarification of a Proposal by the Village as provided herein will not in any way oblige the Village to enter into a final Water and Wastewater Services Agreement with that Proponent and will not constitute an acceptance of that Proposal.

SECTION 2: RFP REQUIREMENTS

2.1 Village Contact Information

Brad Cole, Manager of Operations at publicworks@merrickville-wolford.ca and,
Kirsten Rahm, Treasurer at finance@merrickville-wolford.ca
Village of Merrickville-Wolford Municipal Offices
317 Brock Street West, P.O. Box 340
Merrickville, Ontario
K0G 1N0

2.2 Schedule

RFP Posted:	October 18, 2023
Mandatory Site Visit:	November 3, 2023, at 9:00 am
Last day for questions:	November 17, 2023, at 10:00 am
Electronic Proposal Submission Close	November 27, 2023, at 3:00 pm
RFP Award Decision:	To be determined

Although every effort will be made to meet all the dates shown, the Village reserves the right to modify any or all dates at its sole discretion.

2.3 Duties of the Village of Merrickville-Wolford

2.3.1 *Invite Proponents*

Invite Proponents to submit a Proposal for services to operate, maintain and manage its Water and Wastewater facilities and related assets under a contract (the Water and Wastewater Services

Agreement) effective January 1, 2025, for a proposed initial term of 5 years with the option for a renewal term up to 5 years at the sole discretion of the Village and subject to acceptance by the successful Proponent.

2.3.2 *Clarify Purpose of RFP*

The basic objective of the Village in issuing this Request for Proposal (RFP) is to encourage competition among operations firms to determine the most cost-effective manner of providing the labour required for the operation, maintenance and management of the water and wastewater treatment facilities in the Village, and to determine if continuing to contract these services out to a private contractor is a more cost-effective solution than providing these services in-house.

Following evaluation, should the Village decide to contract these services, they intend to negotiate an operation, maintenance, and management services agreement with the Preferred Proponent for an initial five-year term with an option for up to an additional five (5) year term at the Village's sole discretion. The initial term will run from January 1, 2025, to December 31, 2029. The transitional period will be initiated on September 1, 2024.

2.3.3 *Select Proponent*

All proposals submitted in response to this RFP will be reviewed by an Evaluation Team consisting of the Village CAO (or designate), Operations Manager (or designate), and Treasurer. Consultants and legal advisors may also be utilized for respective expertise/technical support as required.

The Evaluation Team will select the Proponent who can best deliver the water and wastewater services for the purpose above, based on the submitted Proposals evaluated according to the outlined proposal evaluation criteria (see Section 2.12 Evaluation Criteria and Basis for Scoring). RFP award is subject to Village Council Approval.

2.3.4 *Liaise with Successful Proponent*

Liaise with the successful Proponent through negotiation of a Water and Wastewater Services Agreement to ensure the services delivery by the successful Proponent meets the Village's needs in



accordance with its guidelines, policies, and priorities, now and into the future.

2.4 Village Overview

Merrickville- Wolford is a Village in Eastern Ontario, Canada, located in the United Counties of Leeds and Grenville. It spans both shores of the Rideau River. The current municipality was incorporated on January 1, 1998, by amalgamating the former village of Merrickville with the former township of Wolford.

The Rideau Canal locks at Merrickville with three locks have a total lift of 25 ft (7.6 m). On the south side of the locks, there is the old blockhouse, which has been restored by Parks Canada as a tourist site and museum operated by the Merrickville and District Historical Society.

Canada census – Merrickville-Wolford community profile

	2021	2016	2011
Population	3,135 (+2.2% from 2016)	3067 (+7.6% from 2011)	2850 (-0.6% from 2006)
Land area	214.33 km ² (82.75 sq mi)	214.55 km ² (82.84 sq mi)	214.49 km ² (82.82 sq mi)
Population density	14.6/km ² (38/sq mi)	14.3/km ² (37/sq mi)	13.3/km ² (34/sq mi)
Median age	54.4 (M: 53.2, F: 55.6)	51.6 (M: 51.0, F: 51.9)	
Total private dwellings	1,344	1,290	1,248

2.5 Village Water and Wastewater Overview

The Village owns the infrastructure for municipal water and wastewater services.

Water Treatment System

The raw water source for the Village of Merrickville-Wolford drinking water system is groundwater. The water is drawn from three different wells using submersible pumps and transferred to the Main Pump House. Sodium hypochlorite is added to the raw water before entering Clearwell #1, further contact time is provided in Clearwell#2 before transferring the treated water to the distribution system.

The Merrickville-Wolford Water Treatment Plant is a Class II ground water plant using sodium hypochlorite for disinfection.

The distribution system is a Class I system and consists of various piping and high-lift pumps. The

pressure for the distribution system is maintained by the high lift pumps at the main pumphouse as there is no elevated water storage. There are more than 400 water connections, 57 hydrants, 68 valves and 2 pressure blow-offs.

Wastewater Treatment

The Wastewater Treatment Facility (WWTP) is a Class II system and was built in 2011.

The Merrickville Wastewater system utilizes an ISAM treatment system, which includes a surge/anoxic mix tank for optimal process control, ensuring swift and thorough treatment. This surge tank maintains consistent flow and nutrient levels, allowing for effective treatment across a wide range of flows and loads. The secondary treatment process employs sequencing batch reactor (SBR) technology, comprising anaerobic and anoxic tanks, along with a sequencing batch reactor. Within the Sequencing Batch Reactor, an anaerobic selector chamber plays a crucial role in ensuring reliable phosphorous removal by exposing recirculated biomass to anaerobic conditions, thereby facilitating the release of phosphorous. Simultaneously, it generates soluble carbon as a nutrient source for phosphorous removal through the anaerobic conversion of settleable BOD into soluble carbon. The effluent undergoes Ultraviolet disinfection for disinfection purposes, while sludge is aerobically stored and digested. Biosolids are applied to agricultural land in compliance with the Nutrient Management Act. Effluent from the WWTP flows ultimately to the Rideau River.

The Village's collection system is Class I and flows by gravity to the #1 sewage pumping station. From there it is pumped by two submersible pumps to the Wastewater Treatment Plant.

2.6 Background to the RFP

The Village recently undertook a Service Delivery Review of its Water and Wastewater Services to ensure the delivery of its existing water and wastewater services is efficient, affordable, and appropriate for its needs and priorities.

After a review of the various options, the report distilled those considerations down to two (2) potential options. The first was continued contract management and operations provided by the Ontario Clean Water Agency (OCWA), or by another external agency by issuing an RFP, and the second was for Village staff to engage in discussion with neighbouring municipalities to identify if there was an opportunity for a shared services arrangement.

2.7 General Performance Expectations for the Services

The successful Proponent will show that it can best deliver the water and wastewater services described in Schedule A in a way that reflects the performance expectations of the Village and Council. As such, the Proponent will confirm in the Part A - Technical Submission of its Proposal how it will:

- Meet all applicable Laws.
- Apply good industry practices.
- Maintain Village water and wastewater system assets in a state-of-good-repair.
- Practice good communication to build and maintain a strong partnership with the Village, its staff and Council.

The successful Proponent will show how it will be able to improve service performance and efficiency, reduce system(s) risk, and consider the trends and influences that will impact the water and wastewater systems and services to ensure that these services are “future-proof”. The successful Proponent will also submit Prices for the provision of the services that reflect the importance of ensuring affordable water and wastewater rates in the Village.

2.8 Summary Scope of Services to be Delivered (Detailed in Schedule A)

A summary of the services to be provided for the water and wastewater facilities by the successful Proponent include:

1. Core Services. These are the Services that are required to be delivered by the successful Proponent (Contractor) under the final Water and Wastewater Services Agreement with the Village. These Core Services are included in the Fixed Price provided in Schedule A- Pricing Submission.
2. Additional Services. Those services that, in addition to the Core Services, are requested by the Village or recommended by the Contractor during the Term of the Agreement (e.g., engineering services). Prices for these Additional Services will be calculated based on the information in Schedule A - Pricing Submission (i.e., burdened labour rate tables) as costs in addition to the Fixed Price.

2.8.1 Core Services

Services summarized below (and detailed in Schedule A) that are to be provided as Core Services are to be confirmed as such by the Proponent in Part A - Technical Submission and included as part of the Fixed Price for Core Services entered in Part B - Pricing Submission:

1. Routine asset operations and maintenance services of water source/ discharge, treatment, distribution, and collection systems that ensure the best use of key resources, including staff, electricity, and chemicals, to meet all general and specific service performance targets, minimize costs and minimize the Village's carbon footprint.
2. Supervisory services for non-routine (major) repairs, rehabilitation and replacement of asset projects or programs (i.e., for services typically subcontracted to other third-party contractors). Specific non-routine projects such as major repairs, if delivered by the Proponent, are considered as Additional Services, and requested using the Services Request process (as detailed in section A6 in Schedule A)
3. Management services used by the Proponent to deliver its services to the Village, including administrative and operational support services (e.g., financial management, human resources management and training, information technology and information)
4. Plans and reports to be delivered as part of Core Services include:
 - a. Business-related progress & performance reports
 - b. Operations-related progress & performance reports
 - c. Non-Routine (Major) Maintenance Plan (i.e., Major Repairs, Rehabilitation and Replacement) and related progress & performance reports
 - d. All Regulatory Reports required by All Applicable Laws
5. Additional submissions, including:
 - a. Annual submission of certificates of insurance & notification of changes/cancellation
 - b. Event notification and reporting
 - c. Periodic presentations of the Village Council

2.9 Information Required in the Proposal


The proposals prepared by the Proponent will clearly indicate that the document will comply with any applicable provincial and/or federal regulations and will meet all requirements outlined in this request for proposal.

The Proponent will submit the following two documents:

- Part A - Technical Submission (section 2.10)
- Part B - Pricing Submission (section 2.11)

The content and format of the two documents expected from the Proponents are described in the sections below.

2.10 Part A - Technical Submission

Part A - Technical Submission Information Required (50 Points)	
SECTION A1: Cover Sheet	
 <p>MERRICKVILLE-WOLFORD <i>Jewel of the Rideau</i></p> <p>REQUEST FOR PROPOSALS</p> <p>WATER AND WASTEWATER FACILITIES OPERATION AND MAINTENANCE SERVICES</p> <p>The Corporation of the Village of Merrickville-Wolford</p>	
Submitted by:	
Name of Firm	
Address (Include postal code)	
Telephone No. (Include area code)	
Name of Person Signing for Firm	
Office of Person Signing for Firm	
Mandatory site visit date: November 3, 2023, at 9:00 a.m. local time Electronic Proposal submission deadline: November 27, 2023, at 3:00 pm local time.	
Submit to: The Village by emailing Brad Cole, Manager of Operations at publicworks@merrickville-wolford.ca and, Kirsten Rahm, Treasurer at finance@merrickville-wolford.ca	

SECTION A2: Approach & Understanding (20 Points)

1. Describe your overall approach, including:
 - How you will reflect Village priorities in your approach to delivering the Services (e.g., affordability, compliance)
 - How you will practice good communication with Village staff and engage with management, Council and the community
 - What technologies and tools you will bring to this project to complement existing Village systems and enable efficient and effective operations and maintenance (e.g., SCADA, EAMS / CMMS / WMS, mobile tools) and describe what benefits they provide
 - How you will transition the existing operations and assume responsibility for the water and wastewater systems at the start of the Initial Term of the Agreement. Include transitioning of existing staff and vendor relationships, assessing asset condition, assuming needed information, and describing transition responsibilities for all parties. Also, describe any other necessary transition activities. Include a schedule of key transition activities.
2. Describe your understanding of the Core Service requirements, including:
 - How you will apply Good Industry Practices to the provision of the Services
 - How will you ensure compliance with the requirements under the DWQMS.
 - How you will provide care and protection of the Village's water and wastewater systems and assets to ensure they remain in a state-of-good-repair. Including how you will ensure the right amount of time is spent performing actual maintenance (i.e., wrench-on-bolt time) on the Village's water and wastewater system assets.
 - How you will ensure retention of your key staff to reflect the value the Village places on having continuity of staff once they have a good understanding of the Village systems and services and have built a strong relationship with the Village
 - What value-added services you will provide at no additional cost (e.g., recommend projects that obtain federal, provincial, or other funding).

SECTION A3: Relevant Company Experience (15 Points)

1. Describe your organization, including:
 - When you were organized, and if a corporation, when you were incorporated and how many years you have been engaged in providing water and wastewater services for municipal clients.
 - The full name, main office address and indicate the offices that would be principally responsible for delivering and supporting the requested services.
 - Your organization’s vision, mission, and values and how they align with the Village’s requirements and priorities.
 - Your approach to client partnerships and the way your organization works with small to medium-sized municipal clients.
 - The added value your organization brings to clients (e.g., corporate capabilities, strengths)
2. Describe 3 projects where your organization is currently or has delivered water and wastewater system operations, maintenance, and management services to small and medium-sized rural communities:
 - Summarize recent client projects, including:
 - Detailed project profiles for each project that highlight your ability to successfully deliver these services for similar clients (i.e., size, location, services provided)
 - Individual references for 3 projects, including client contact name, address, and phone number

SECTION A4: Key Personnel Experience (15 Points)

1. Describe your project team and their experience delivering similar services, including:
 - How your team will be organized and work with the Village team (include an organization chart showing both parties), indicating:
 1. Who will lead the team (e.g., manager / ORO)
 2. Who will contribute to the team (e.g., operators, mechanics, technicians, electricians) and how they would contribute.
 3. How the day-to-day interaction with the Village would work.
 - How any specialty staff (e.g., SCADA, water process, assets) not directly on the team would contribute to supporting service delivery at the Village.
 - Your ability to bring in additional water operations, maintenance, or specialty staff on a timely basis to ensure continuity of care and succession planning (“bench strength”)
 - How you will continue to maintain and build staff skills (e.g., stay up on the latest regulations, ensure healthy and safe operations, learn new skills)
 - How the team will respond to an emergency, leveraging the organization and engaging the Village
 - Note: Any changes to the proposed organizational structure during the initial term must be approved by the Village

SECTION A5: Signed Declaration by Owner/Partner with Authority to Bind	
<p>To: The Village of Merrickville-Wolford</p> <p>I/We the undersigned hereby offer and agree to the delivery of services for the water and wastewater systems to the Village of Merrickville-Wolford as described in this Technical Submission. In addition, I/We hereby agree that we have reviewed Section 3: General Terms and Conditions, including the indemnification and hold harmless requirements, and the insurance requirements that shall meet or exceed those set out in Schedule B unless otherwise agreed to by the Village.</p>	
PROPOSAL SUBMITTED BY:	
COMPANY NAME:	
ADDRESS:	
CITY:	
POSTAL CODE:	
TELEPHONE NUMBER:	FACSIMILE:
EMAIL:	WEBSITE:
SIGNATURE:	PRINT NAME:
TITLE:	DATED:

Part B - Pricing Submission
Information Required (50 Points)

SECTION B1: Cover Sheet



REQUEST FOR PROPOSALS
WATER AND WASTEWATER FACILITIES
OPERATION AND MAINTENANCE SERVICES

The Corporation of the Village of Merrickville-Wolford

Submitted by:

Name of Firm

Address (Include postal code)

Telephone No. (Include area code)

Name of Person Signing for Firm

Office of Person Signing for Firm

Mandatory site visit date: November 3, 2023, at 9:00 a.m. local time

Electronic Proposal submission close date: November 27, 2023, at 3:00 p.m. local time.

Submit to:

The Village by emailing Brad Cole, Manager of Operations at publicworks@merrickville-wolford.ca
and, Kirsten Rahm, Treasurer at finance@merrickville-wolford.ca

2.11 Part B - Pricing Submission

SECTION B2: Fixed Price for Core Services (45 Points)

Provide a Fixed Price (Excl. HST) for the provision of Core Services for the first year of the 5-year term of the Agreement into Pricing Table B2-1.

Pricing Table B2-1: 5-Year Fixed Price for Core Services

Services Requested	Fixed Price 2024
Core Services	[ENTER \$]
Annual adjustment (e.g., amount, factor) – if any	[ENTER \$]

Costs that are to be considered as part of the Core Services Fixed Price calculation include routine operations, maintenance, and management costs, including:

- Salaries and Benefits
- Telephone and telecommunication costs
- Insurance costs
- Vehicle costs
- Training costs

Pricing Table B2-2: Transition Fixed Price

Service	Estimated Price
Provide a fixed cost for all transitional requirements prior to start of the Initial Term	[ENTER \$]



SECTION B3: Time and Materials Pricing Basis (5 Points)

Provide the average fully burdened rate per hour for staff in the positions/roles shown in Table B3-1 below. These rates would be applied to any Additional Services that the Proponent may be requested to deliver by the Village during the Term of the Agreement

Pricing Table B3-1: Rates / Hour for Proponent Resources

	2024 Average Rate Per Hour in \$
• Senior Certified Operator (minimum Class II)	[ENTER \$]
• Lead Hand / Foreperson / Team Lead	[ENTER \$]
• Site Manager / Operations Manager	[ENTER \$]
• Compliance Specialist (e.g., QMS rep)	[ENTER \$]
• Asset Management / Process / Process Control Specialist	[ENTER \$]
• Administrative Assistant	[ENTER \$]
• Project Manager / Engineer	[ENTER \$]

Notes:

1. Indicate any factor(s) that impact the hourly rates for Positions / Roles during the initial term of the Agreement (e.g., annual adjustment factor)
2. Any necessary purchases for these activities will be considered Non-Routine Maintenance (Major Repairs, Rehabilitation, Replacement) and considered to be an Additional Service. Upon Approval from the Village, these items will be paid for as capital expenditures and procured as per the Procurement Policy (Schedule C).

SECTION B4: Signed Declaration by Owner/Partner with Authority to Bind (Mandatory)

SECTION B4: Signed Declaration by Owner/Partner with Authority to Bind	
To: The Village of Merrickville-Wolford	
I/We the undersigned hereby offer and agree to the delivery of services for the water and wastewater systems to the Village of Merrickville-Wolford as described in this Technical Submission. In addition, I/We hereby agree that we have reviewed Section 3: General Terms and Conditions, including the indemnification and hold harmless requirements, and the insurance requirements that shall meet or exceed those set out in Schedule B unless otherwise agreed to by the Village.	
PROPOSAL SUBMITTED BY:	
COMPANY NAME:	
ADDRESS:	
CITY:	
POSTAL CODE:	
TELEPHONE NUMBER:	FACSIMILE:
EMAIL:	WEBSITE:
SIGNATURE:	PRINT NAME:
TITLE:	DATED:

2.12 Evaluation Criteria and Basis for Scoring

Proponent submissions will be evaluated as shown in the following steps:

- 1.** Part A - Technical Submission will be opened and checked for mandatory submission requirements. Only those Proponents meeting the mandatory requirements will continue to Step 2.
- 2.** Part A - Technical Submission will be reviewed and scored based on the description provided in Table 2.12-1 below. Only Proponents that achieve a total score of 70% of achievable technical points or higher (i.e., a minimum score of 35 out of 50) will continue to Step 3
- 3.** Part B - Pricing Submission will be opened and checked for any additional mandatory submission requirements. Only those Proponents meeting the mandatory requirements will continue to Step 4
- 4.** Part B - Pricing Submission will be reviewed and scored based on the description provided in Table 2.12-1 below.
- 5.** Scores from Part A - Technical Submission and Part B - Pricing Submission will be added together, and the highest combined total score will form the general basis for the selection of the successful Proponent to provide the services and requirements of this RFP.

Table 2.12-1: Evaluation Criteria and Basis for Scoring

Evaluation Criteria	Maximum Points	Points Scored
PART A - TECHNICAL SUBMISSION	50	
(a) Project Understanding and Approach	20	
(b) Company Experience	15	
(c) Key Personnel Experience	15	
PART B - PRICING SUBMISSION	50	
1. Fixed Price for Core Services (a) Evaluation Formula to be used to calculate points achieved: $\frac{\text{Lowest Proponent's Price}}{\text{Proponent's Price}} \times \text{Maximum Available Points} = \text{Points Achieved}$	45	
Where Price is the 2024 Fixed Price + Transition Price + (subsequent years' FIXED PRICE + any increasing factor over the 5-year) = (Cumulative Total) (b) Example: Lowest Cumulative Price = \$900,000; Proponent's Price = \$1,000,000; Points Available = 45; then Points Achieved = 0.9 X 45 = 40.5 Points		
3. Labour rates for Additional Services charged on a Time and Materials basis	5	
Total Points	100	

2.13 Acceptance or Rejection of Proposal Submissions

The submission of Proposals does not obligate the Village to accept any Proposal or to proceed with the procurement process. The Village reserves the right to accept or reject any or all Proposals or to accept any Proposals should it be deemed to be in its best interest to do so in its sole and absolute discretion. The lowest price submission will not necessarily be accepted. A Pricing Submission that contains prices that appear to be out of alignment with the RFP requirements and/or the accompanying technical submission and is judged by the Village to likely adversely affect their interests may, particularly in the absence of an explanation that is acceptable to the Village, be rejected at the sole discretion of the Village.

All submitted Proposals and supporting documentation become the property of the Village and will not be returned.

2.14 Final Services Agreement Negotiations (after Evaluation and Selection)

Village staff intends to select the successful Proponent on [date to be determined]. The Village intends to then immediately commence negotiations in good faith and on an exclusive basis with the selected Proponent to reach a final Water and Wastewater Services Agreement.

The materials contained in the Proponent's response to this RFP may be attached to any final Water and Wastewater Services Agreement executed between the parties.

Notwithstanding the foregoing, the Village may, at any time in its sole discretion, cease negotiations with the selected Proponent and commence negotiations with another Proponent. In addition, the Village may elect at any time in its sole discretion to cancel the entire process without liability for the cost or expenses incurred by the selected Proponent or any other Proponent in conducting negotiations with the Village or in responding to this RFP.

SECTION 3: GENERAL TERMS & CONDITIONS

3.1 Interpretation

- Any final Water and Wastewater Services Agreement that results from this RFP is the “Agreement.”
- “Water and Wastewater Services” means those Core Services agreed to by the Parties to be governed by the Agreement. Such water and wastewater services will include the whole of the work to be performed and materials to be furnished necessary to carry out those services as specified under the RFP or Agreement.
- The successful Proponent in the RFP process will be the “Contractor” in any resulting Agreement if they accept the Village’s appointment to perform the water and wastewater services as set out in the terms and conditions in the Agreement.

3.2 Waiver of Claim for RFP Instructions

Proponents expressly waive any and all rights to make any claim against the Village for any matter arising from the Village exercising its rights as stated in these instructions to Proponents.

3.3 Fraud or Bribery

Should the Proponent, any of his/her agents give or offer any gratuity to, or attempt to bribe any member of the awarding body, officer or servant of the Village, or to commit fraud against the Village, the Village will be at liberty to declare that Proponent’s proposal submission void forthwith, or to take the whole or any part of the resulting Agreement out of the hands of the Proponent, and to invoke the provisions of termination.

3.4 Due Diligence

The Proponent accepts the systems and the assets and the water and wastewater services requirements in the condition thereof existing at the RFP closing date/effective date of the agreement, and acknowledges that it has investigated and satisfied itself:

1. As to the nature of the Core Services proposed/agreed to.
2. To the best of the Proponent’s/Contractor’s knowledge, as to the location of and all conditions relating to the systems and the assets including accessibility, general character, surface conditions, utilities, roads, uncertainties of seasonal weather and all other physical,

topographical, and geographical conditions.

3. As to the general character, quality, quantity and availability of equipment and materials required to execute and complete the Core Services proposed/agreed to.
4. To the best of the Proponent's knowledge, as to all environmental risks, and conditions.
5. As to applicable Laws and restrictions applicable to the Proponent and to the Core Services proposed/agreed to that might affect those water and wastewater services; and all conditions affecting labour, including availability, productivity, and administrative practices, including those relating to health and safety, prevailing or applicable to the Core Services or the Additional Services proposed/agreed to.
6. And any failure by the Proponent to discover matters which affect or could affect the Core Services or the Additional Services proposed/agreed to at the RFP closing date/ effective date shall not relieve the Proponent from its proposal submissions/obligations under this Agreement or otherwise affect the Fixed Price for Transitional Services, the Fixed Price for Core Services or any estimated prices for such Additional Services.

3.5 Relationship Between the Parties

3.5.1 *Status of the Contractor*

The Proponent will be engaged as an independent contractor for the sole purpose of performing the water and wastewater services. Neither the Proponent nor any of their personnel will be engaged as an employee, servant, or agent of the Village.

3.5.2 *Conflict of Interest*

The Village recognizes that the Proponent may be performing contract services prior to and during the Term of the Agreement for other parties provided that such performance of other services will not conflict with or interfere with the Proponent's ability to perform the water and wastewater services under this Agreement.

1. Prior to execution of any Agreement, the Proponent will disclose to the Village any potential conflict of interest. If a conflict of interest does exist, the Village may, at its discretion, withhold its execution of the Agreement with the Proponent until the matter is resolved to the satisfaction of the Village.
2. During the Current Term, if the Proponent is retained by another party giving rise to a potential

conflict of interest, then the Proponent will inform the Village and if a significant conflict of interest is deemed to exist by the Village, the Proponent agrees to resolve any such conflicts in favour of the Village by either refusing the new client assignment or taking such steps as are necessary to remove the conflict of interest.

3.5.3 *Subcontracting*

Unless otherwise provided in the Agreement, the Proponent will obtain the consent of the Village in writing prior to subcontracting or permitting the subcontracting of any portion of the services. Notwithstanding the above, the Proponent may, without prior consent of the Village, subcontract such portions of the services as is customary in the carrying out of similar agreements. In any subcontract, the Proponent will, unless the Village otherwise consents in writing, ensure that the subcontractor is bound by the terms and conditions of the Agreement.

3.6 Term of Water and Wastewater Services Agreement

3.6.1 *Initial Term*

The Agreement is proposed to commence on the Effective Date (January 1, 2025) and, subject to early termination in Section 3.17 will continue in effect for an initial term of 5 years ending on December 31, 2029 (the "Initial Term").

3.6.2 *Renewal Term*

On expiry of the Initial Term, the Agreement may be renewed for up to another 5-year term(s) ("Renewal Term") subject to the requirements below:

Notice to Renew

- a. The Village will notify the Proponent in writing at least 12 months before the expiry of the Initial Term whether it intends to renew the Agreement.
- b. If the Village gives notice that it intends to renew, the Proponent must notify the Village in writing of its decision to accept or decline the request to renew within 30 days of receiving the Village's request.
- c. If the Village gives notice under (a) that it does not intend to renew the Agreement, or if the Proponent declines a request to renew under (b) then the agreement will terminate in accordance with Section 3.17 upon expiry of the Current Term or of the agreed to extension period.

Agreement to the Fixed Price on Renewal

If the Village notifies the Proponent that it wishes to renew the agreement and the Proponent accepts then no later than six (6) months before the expiry of the Current Term the parties will negotiate in good faith on a Fixed Price for a Renewal Term. If the parties fail to reach an agreement on the Fixed Price and any Adjustment Factor, then the agreement will terminate in accordance with Section 3.17 upon expiry of the Current Term or of the agreed to extension period.

Performance Review

The Village reserves the right to conduct a performance review prior to notifying the Proponent whether it intends to renew the Term of the Agreement.

3.7 Service Inspection and Performance Reviews

The Services and any and all parts thereof will be subject to inspection and acceptance by the Village. The Village reserves the right to conduct performance reviews during the Term of the Agreement including prior to the Village's decision whether to renew the agreement.

Such reviews may include comparing actual results against the general service performance standards and the performance measures and targets contained in Schedule A and the Village will draw on reports from that schedule as part of the review process.

The Village reserves the right to request additional information from the Proponent that relates to the water and wastewater systems, assets and services and may engage an appropriate professional to assess service performance or information related to performance.

3.8 Accessibility for Ontarians with Disabilities Act, 2002 (AODA)

The Village is committed to providing equal treatment to people with disabilities with respect to the use and benefit of Village services, programs, and goods in a manner that respects their dignity and that is equitable in relation to the broader public.

All contractors with the Village must comply with all laws applicable to the performance of the

work. All deliverables developed by the Proponent for the RFP and as a Contractor for any resulting Agreement, including reports and presentation materials, must be in compliance with AODA Regulation 191/11.

Effective 1 January 2010, third-party Contractors who deal with the public or other third parties on behalf of the Village, as well as contractors who participate in developing Village policies, practices or procedures governing the provision of goods and services to members of the public or other third parties, must conform with the Accessibility Standards for Customer Service, O. Reg. 429/07 (Appendix A), under *The Accessibility for Ontarians with Disabilities Act, 2005 (AODA)*.

The Proponent will ensure that AODA training records are maintained, including dates when training is provided, the number of employees who received training and individual training records. Proponents are required to ensure that this information will be made available if requested by the Village.

3.9 Purchasing Policy and Environmental Purchasing

The Proponent will adhere to the Village's Purchasing Policy (see Schedule, C), as changed from time to time, as a minimum standard, if in the delivery of the services it purchases any goods or materials or subcontract any part of the water and wastewater services to an authorized external contractor, vendor, or supplier.

In particular, the Village is committed to environmentally sound practices in fulfilling its mandate in the planning and provision of materials, services, and programs and, consistent with this policy, the Proponent will commit to the adoption and promotion of environmentally sound practices in the delivery of the Services.

3.10 Proprietary Information

The Village and Proponent each own proprietary information. Each party grants to the other a restricted license to use proprietary information received from the other party during the term of the agreement solely for the purpose of the delivery of the water and wastewater services. Each party acknowledges and agrees that their respective proprietary information will remain the property of that party. Proprietary information is subject to confidentiality.

3.11 Confidentiality

The parties shall strictly maintain confidential and secure all proprietary information provided, directly or indirectly, by the other party pursuant to the agreement. Subject to applicable laws, including relevant legislation related to freedom of information or the protection of privacy, neither party shall directly or indirectly disclose to any person, either during or following the expiry of this agreement any such material or information provided to it by the other party unless they have first obtained the written consent to allow such disclosure from the party who provided the material or information in question.

3.12 Infringement of Intellectual Property Rights

The Proponent warrants that no services and any materials or goods furnished in accordance with this Agreement will infringe upon any patent, registered industrial design, trademark, trade secret, copyrighted work, or other intellectual property right. The Proponent at its sole cost and expense will defend and hold harmless the Village, its agents, employees, and customers against any and all suits, actions and claims arising out of any and every charge of infringement.

3.13 Municipal Freedom of Information and Protection of Privacy Act

The Village is subject to the *Municipal Freedom of Information and Protection of Privacy Act*, R.S.O. 1990, c.M.56, as amended ("MFIPPA") with respect to, and protection of, information under its custody and control. Accordingly, all documents provided to the Village in response to this RFP and in the performance of the services under any resulting agreement may be available to the public unless the party submitting the information requests that it be treated as confidential. All information is subject to MFIPPA and may be subject to release under the Act, notwithstanding a request to keep the information confidential.

3.14 Dispute Resolution

Negotiation

In the event of dispute arising out of or related to this agreement, the parties shall first use all reasonable efforts to resolve the dispute by negotiation consistent with the general standard of good communication.

Mediation

If the dispute is not satisfactorily resolved by negotiation between the parties, either party shall be

entitled to call for the dispute to be referred to a third-party mediator who is agreed to by both parties and the fees and expenses of whom shall be divided equally between the parties. All proceedings facilitated by the mediator are to be conducted by the parties in good faith and without prejudice. If the dispute has not been resolved within 60 days after the appointment of the mediator either party may by notice to the other withdraw from the mediation process.

Participation in mediation is without prejudice and does not bar a party from pursuing other available legal remedies including litigation.

3.15 Indemnification

The Proponent will indemnify and save harmless the Village and its respective directors, officers, employees, and servants from any and all claims, demands, causes of action, loss, costs or damages that the Village may suffer, incur or be liable for resulting from the negligent performance or non-performance of the Proponent of their obligations under any resulting agreement.

3.16 Conditions of Insurance

Upon acceptance of the award of contract by the Village, the successful Proponent shall provide the Village with a Certificate of Insurance confirming that they have obtained insurance that meets or exceeds that set out in Schedule B - Insurance Requirements, unless otherwise agreed to by the Village.

All such insurance policies shall be endorsed to provide the Village with thirty (30) days prior written notice of cancellation, change or amendments to coverage to the attention of the Village Infrastructure and Contract Manager.

During the Term of any resulting Agreement, the Proponent shall provide a Certificate of Insurance annually as part of the reporting requirements for Core Services.

3.17 Termination

3.17.1 *Termination on Expiry*

- a. The agreement will terminate on the expiry of the Current Term or on expiry of an agreed to extension period (under b.) under the following circumstances:

- (i) The Village gives the Proponent notice it does not intend to renew the agreement; or
 - (ii) The Proponent declines a request to renew by the Village; or
 - (iii) The parties agree to renew but cannot reach agreement on the Fixed Price for the Renewal Term within the time limit set out as required in section 3.6.2.
- b. If any of the conditions in section 3.17.1(a)(i) through (iii) are met, the parties may agree to extend the Current Term by a specified duration of no more than 24 months upon the same terms and conditions as the Current Term.

3.17.1 Early Termination for Cause

During a Current Term, this agreement may be terminated early by either party, if the following conditions are satisfied:

- There has been a material breach of the agreement; and
- The party complaining of the breach has given at least 30 days' written notice of the breach to the other party; and
- The other party does not correct the breach within 30 days, or such other period of time as may be mutually agreed to by the parties in writing.
- If either party disputes the existence of a breach or that the breach is material, then the dispute may be referred to dispute resolution process under Section 3.10

3.18 Entire Agreement

The agreement constitutes the entire and sole agreement between the parties with respect to the subject matter hereof and supersedes all previous negotiations, communications, and other agreements whether written or oral, relating to it, unless they are incorporated by reference in the agreement. There are no terms, covenants, representations, statements, or conditions binding on the parties other than those contained in the agreement. Neither party has relied upon any such prior or contemporaneous communications.

3.19 Governing Law

This agreement will be interpreted and governed, and the relations between the parties determined by the laws in force in the Province of Ontario and the parties irrevocably attorn to the jurisdiction of the courts of the Province of Ontario

3.20 Amendments and Waivers to be in Writing

Amendments to the agreement will be in writing and be executed by the authorized representatives of both parties. If agreed to in writing by both parties an amendment will form a valid and binding part of the agreement. No waiver of any breach of any provision of this agreement will be effective or binding unless it is in writing and signed by the authorized representatives of both parties purporting to give such waiver and, unless otherwise provided, will be limited to the specific breach waived

SCHEDULE A: WATER AND WASTEWATER SYSTEMS AND SERVICES

A.1 Introduction

This part of the RFP describes the Village's water and wastewater systems and assets as well as the services to be provided by the contracted Proponent including the water and wastewater processes to be operated, assets to be maintained and protected, and management activities to be performed to deliver water and wastewater services to the Village and its customers to agreed service levels. Whereas the Village retains ownership of its water and wastewater systems assets and accountability for its water and wastewater services, it intends to delegate responsibility for caring for and operating these systems and provision of related services to a qualified third-party provider.

A.2 Water and Wastewater Systems Summary Description

A.2.1 *Purpose of Water Systems and Services*

The purpose of the Village's water and wastewater systems and services is to provide agreed service levels and in accordance with all applicable Laws to customers in the Village to ensure the protection of public health and safety, enablement of economic development and protection of the environment.

A.2.2 *Description of Water System*

Water Source

Raw water is taken from three (3) different underground wells in the Village of Merrickville-Wolford (see Figure 1).

Well Number 1 is positioned on the northern side of Main Street East, around 60 meters east of St. Lawrence Street. This well, designated as Well No. 1, comprises a drilled groundwater production structure with a diameter of 250 mm and a depth of 35 meters. It is outfitted with a submersible deep well pump that has a capacity of 7.9 litres per second and operates at a total dynamic head of 13 meters. Every entry point to the well structure is fitted with finely woven stainless-steel screening. Sodium hypochlorite is injected into the water extracted from this well and then is measured by a flowmeter before it is conveyed to the Main Pumping House common line for

additional treatment processes.

Well Number 2 is located on the north side of Main Street East approximately 60 metres east of St. Lawrence Street. Well No. 2 consists of a 200 mm diameter 49-metre-deep drilled groundwater production well, equipped with a submersible deep well pump (4.7 L/s at a TDH of 10 m). Every entry point to the well structure is fitted with finely woven stainless-steel screening. The untreated water extracted from this well is measured by a flowmeter and subsequently directed to the common raw water discharge line of Wells # 2 and 4 where sodium hypochlorite is injected for disinfection. In the discharge line, water is conveyed to the Main Pumping House for additional treatment.

Well Number 4 is located on the north side of Main Street East approximately 85 metres east of St. Lawrence Street. Well No. 4 consists of a 200 mm diameter 50-metre-deep drilled groundwater production well, equipped with a submersible deep well pump (rated at approximately 9.2 L/s at a TDH of 15 m). Every entry point to the well structure is fitted with finely woven stainless-steel screening. Sodium Hypochlorite is injected into the water extracted from this well and then is measured by a flowmeter before it is conveyed to the Main Pumping House common line for additional treatment processes.

Main Pump House

Raw water enters the Main Pumphouse building (4.5 m x 9 m brick building) located at the site of Well No. 1.

The primary pumping system encompasses housing for treatment, pumping, and control equipment. This setup includes a pump header with a diameter of 150 mm and associated components like a magmeter flow meter. The raw water pumped is measured in the line for Free Chlorine and Turbidity before being discharged into a reservoir with two compartments described below (Clearwell #1 & #2).

The reservoir/Clearwell, located below and extending behind the main pumphouse, comprises two cells. Clearwell Cell #1 lacks baffles, measuring 18 m x 13.5 m x 3.5 m in depth and providing a storage volume of 590 m³. Clearwell #1 provides contact time and storage for the processed water. An ultrasonic level transmitter measures the level in Clearwell #1 and alarms when the level reaches the low or high-level setpoints. Clearwell #1 can be bypassed directing the flow from the

inlet line of Clearwell #1 to Clearwell #2.

Clearwell Cell Number 2 is baffled using an internal longitudinal partition wall, measuring 19.5 m x 2.6 m x 3.2 m deep, and offering a storage volume of 141 m³. Effluent from Clearwell #1 enters Clearwell #2 where the longitudinal baffles help direct the flow of water within the tank, preventing the swirling or circular motion of the fluid, ensuring that it flows in a more controlled and uniform manner. An ultrasonic level transmitter measures the level in Clearwell #2 and alarms when the level reaches the low or high-level setpoints.

Two high lift centrifugal pumps: a primary (flow rate of 15 L/s at a total dynamic head (TDH) of 50 m), and a standby pump (flow rate of 22.5 L/s at a TDH of 50 m) transfer the water to the pumping station's discharge main. Two ultrasonic Doppler flow meters are installed at each of the high lift pumps discharge (for process calculations only). An electrically powered, horizontally mounted, constant-speed split-case centrifugal fire pump (flow rate of 64 L/s at a TDH of 57 m) is connected to the discharge line of Clearwell #2 as a backup pump. Clearwell #2 can be bypassed, directing the flow from Clearwell #1 straight to the pumping station's discharge main.

In the discharge main line, a pressure sensor measures the discharge pressure of the pumping station, and a turbidity meter and a chlorine residual analyzer are installed to continually monitor the flow. A control system is connected to an automatic dialler, to alert when at low/high chlorine residual levels and high turbidity in the effluent are present. Additionally, an Endress+Hauser flow meter is connected to the treated water line to the distribution system for continual record and monitoring. Refer to Figure 2 for a visual representation of the entire Drinking Water Treatment process.

Disinfection

Disinfection is achieved through two chemical metering systems that introduce sodium hypochlorite solution (liquid chlorine) into the Clearwell/reservoir. One system is located in the Main Pumphouse and consists of a 45-liter sodium hypochlorite day tank with spill containment, along with a chemical metering pump (rated at 1.6 L/h at a TDH of 96.5 m). This system injects sodium hypochlorite into the raw water discharge line of Well No. 1. The second chemical metering system, situated in Well House No. 4, mirrors the first and injects sodium hypochlorite into the common raw water discharge line of Wells # 2 and 4. A spare chemical metering pump with the same specifications is kept in the Main Pumphouse.

Wastewater from all the analyzers (chlorine, turbidity) flows into a tank with a manhole cover,

called a Dichlorination Chamber. There, a perforated bucket hangs with dichlorination pucks to dechlorinate the wastewater before being drained into an on-site ditch.

Emergency power for the Main Pumphouse comes from a stationary 120 kW diesel generator set, complete with an above-ground fuel storage tank and spill containment. This generator is housed in a separate insulated building located roughly 20 m north of the Main Pumphouse.

The distribution system spans 8,000 m and consists of various types, sizes, and ages of watermain, including 10" Blue poly, 8" and 6" ductile iron, and 4" ductile iron pipes. The system comprises around 390 residential connections and approximately 50 commercial connections, serving about 1,200 residents, additionally, there are 57 hydrants, 68 valves and 2 pressure blow-offs. Well No. 3, located on Amelia Street, has been properly abandoned in compliance with Regulation 903.

Table 1. Treatment System Summary Merrickville – Wolford WTS

Treatment facility description:	Disinfection with sodium hypochlorite solution using two chemical metering systems (in Well #1 and common discharge line of Well #2 and Well #4)
Capacity:	1880 m ³ /day
Service area:	Village of Merrickville (see Figure 3)
Service population:	1200
Raw water source:	Ground Water
Disinfection method:	Sodium Hypochlorite (liquid chlorine)
Operated by:	Ontario Clean Water Agency OCWA
System Owner	The Corporation of the Village of Merrickville-Wolford
Drinking Water Licence Number	264-101
Water Taking Permit Number	2110-AP9LSG
Drinking Water System Name	Merrickville Drinking Water System

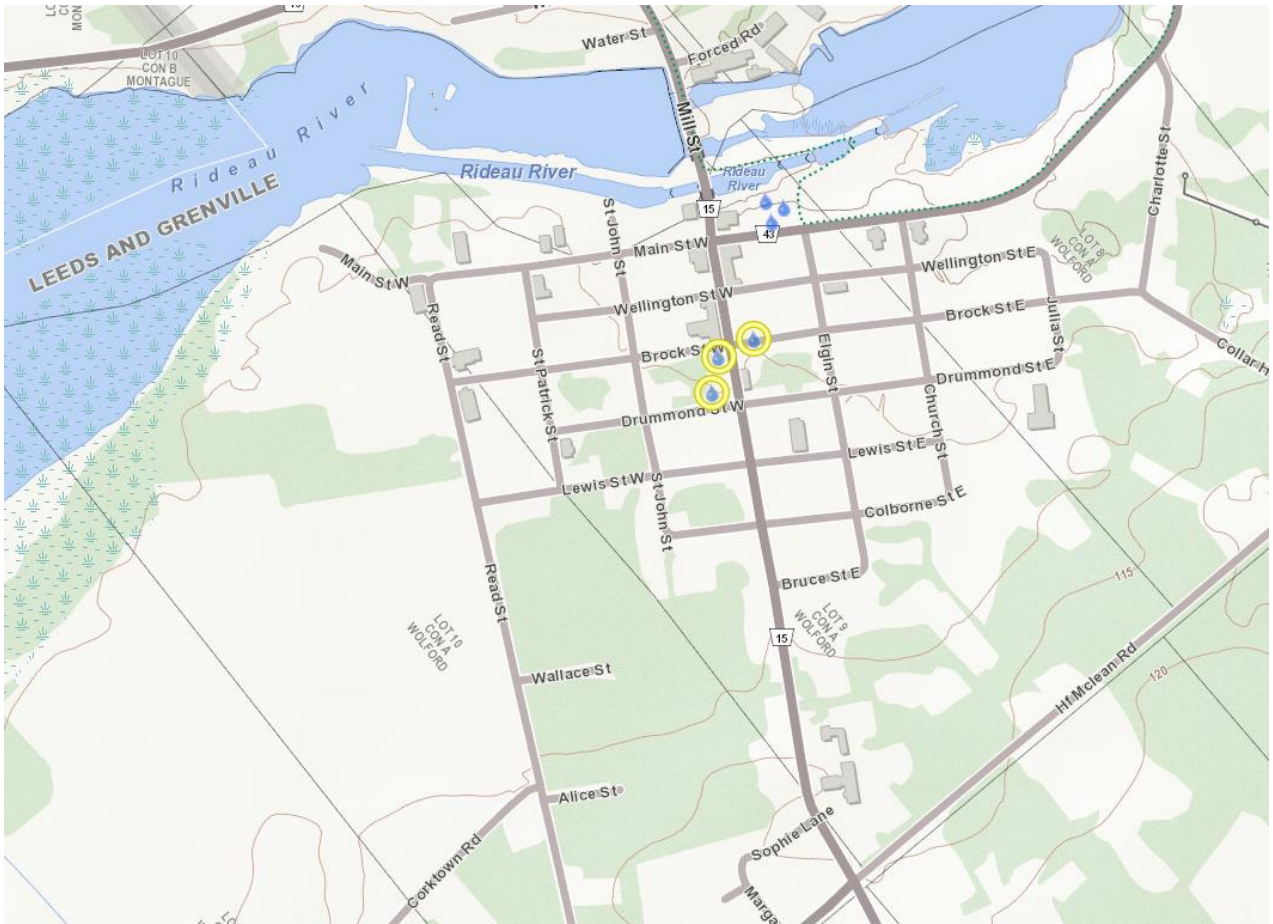


Figure 1. Location of Well #1, Well #2 and, Well #4 in the Village of Merrickville- Wolford

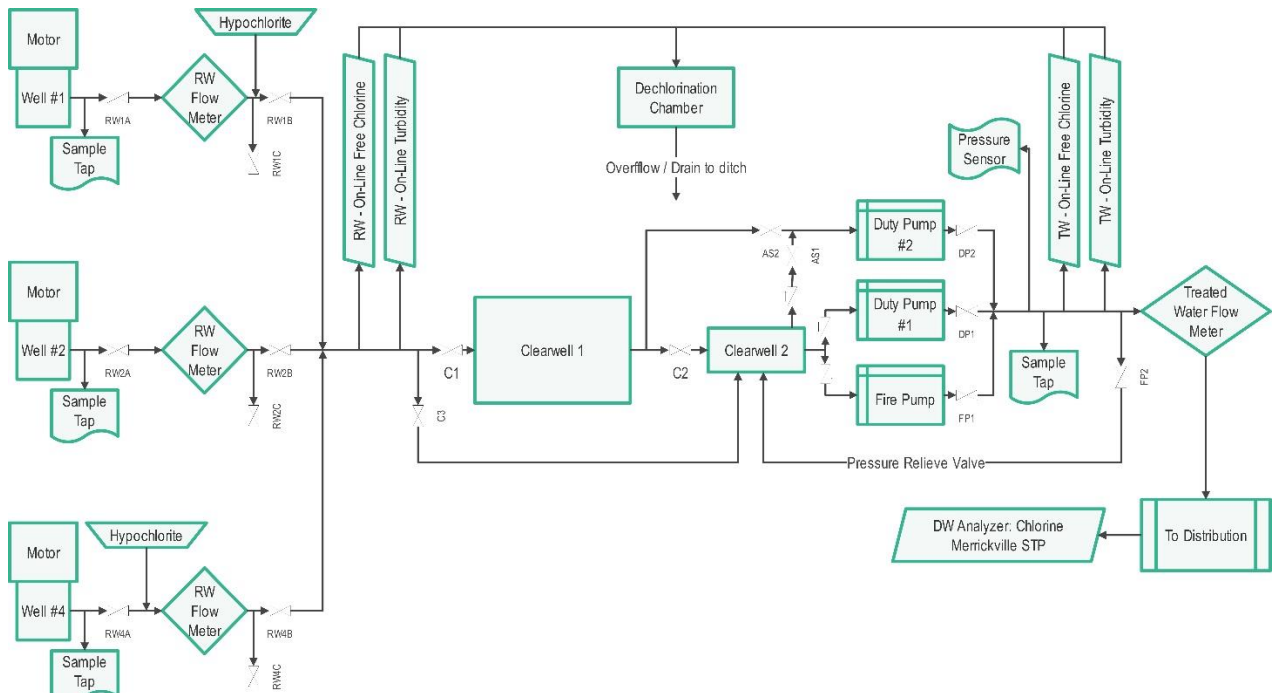


Figure 2. Process Flow Chart for the Village of Merrickville Drinking Water System

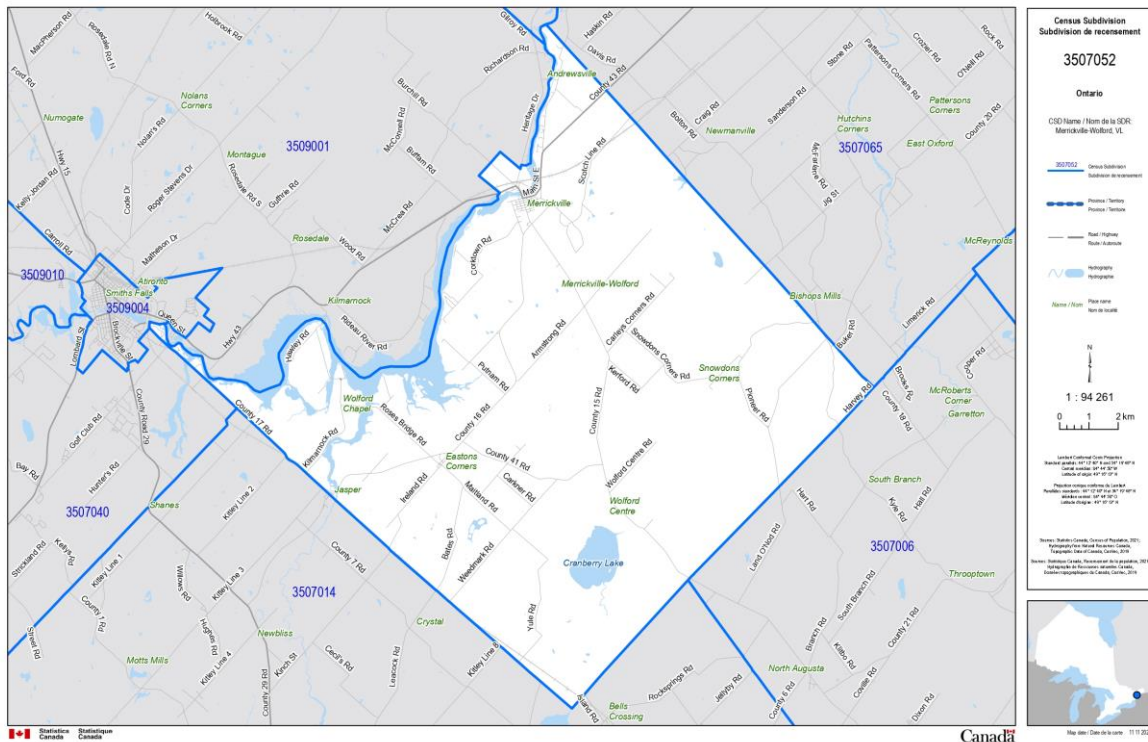


Figure 3. Village of Merrickville-Wolford

A.2.3 Description of Wastewater System

Collection System

The Wastewater Collection System within the Municipality of Merrickville- Wolford consists of works for the collection and transmission of sewage, consisting of separate sewers, combined sewers, two (2) sewage pumping stations, and forcemains, with discharge into the Merrickville Sewage Treatment Plant.

Sewage Pumping Station #1, located at 320 Main Street East, was constructed in 2011. Three (3) submersible sewage pumps (rated at 29 L/s at TDH of 35m) are installed to handle a total peak flow rate of 44 L/s (at TDH of 45 m). The wastewater is pumped to the inlet chamber of the Merrickville Sewage Treatment Plant (STP) through a 150 mm diameter forcemain. Overflows are discharged to the Rideau River. The pumping station is monitored through a SCADA system located at the STP.

Sewage Pumping Station #2, was constructed for future use and it is not operating currently. Two (2) submersible sewage pumps (rated at 24 L/s at TDH of 11.3 m) are designed but not installed. The wastewater can be pumped to the inlet chamber of the Merrickville Sewage Treatment Plant (STP) through a 150 mm diameter forcemain. Overflows are discharged to the Rideau River. The

pumping station is monitored through a SCADA system located at the WWTP.

Preliminary Treatment

At the inlet piping to the STP, a fine screen (with 6mm spacing), auger and channel grinder support the removal of large debris and objects that could damage or clog downstream equipment. The screen can be bypassed and the flow will be directed to a manual bar rack.

Screened wastewater moves to the line, where a manual bar screen filters larger debris and influent wastewater flow is measured by a flowmeter in a chamber (3.6 m x 3.6 m x 4 m) prior to being stored in the Septage Holding Tank. Incoming measured wastewater and supernatant from the Digester Tank enter the Septage Holding Tank where further separation occurs when larger particles sink to the bottom of the tank. Flow is pumped by two (2) chopper-type submersible sewage pumps (duty and standby, rated at 4.6 L/s at TDH of 5m) to the Grit Channels.

The wastewater then flows to two (2) horizontal manually cleaned Grit Channels (7 m x 0.56 m) where further separation occurs and flow is stabilized by a velocity control weir before entering the Integrated Surge Anoxic Mix (ISAM) Tanks.

Secondary Treatment

There are two ISAM Tanks for water treatment. Each of these tanks has three components: 1) an Anaerobic Chamber, 2) a Surge Anoxic Mix (SAM) Reactor, and, 3) a Sequential Batch Reactor (SBR) Basin.

Wastewater enters the anaerobic reactor for pretreatment, sludge thickening and sludge destruction, complex organics solids undergo hydrolysis to simpler solvable organics which pass to the SAM Reactors by downfacing piping. In addition to flow regulation, the SAM Reactors provide an optimum environment for denitrification, recycling nitrates and stabilization of the solvable organics from the Anaerobic Tank. The conditioned mixed liquor now passes to the (SBRs) for completion of BOD, nitrogen removal and solids separation. Aeration is cycled on and off to provide the dissolved oxygen through 5 (five) different phases: Fill, Interact, Settle, Decant and Filled Decant phase. During the decanting phase, treated effluent is withdrawn from the upper portion of the SBR tanks and directed to the Ultraviolet Channel for disinfection.

The ISAM Tanks are monitored by NEMA control panels for level, TSS levels, and, DO levels.

Tertiary Treatment

Effluent from the ISAM Tanks flows by gravity to the UV disinfection system where two UV banks operate on duty/standby. The UV channel (8 m long x 0.3 m wide x 0.92 m deep) provides UV light to effectively kill or inactivate microorganisms, including bacteria, viruses, and mould. Effluent is directed into the 500 mm diameter outfall that ultimately discharges to the Rideau River.

Chemical Addition

Ferric chloride is a flocculant added to the processed wastewater at the SAM Reactor portion of the ISAM Tanks to enhance the removal of a wide range of contaminants from wastewater, including suspended solids, organic matter, and some metals. The chemical system is comprised of a 20,000 L fibreglass reinforced plastics (FRP) Ferric Chloride storage tank; and two (2) (one duty, one standby) chemical feed pumps each having a capacity of 6.2 L/hr at a discharge pressure of 690 kPa.

Sludge Management

Sludge removed from the Anaerobic Chamber and SBR portion of the ISAM Tanks is transferred to the Aerobic Digester (118m³), which has two cells for Stage 1 and Stage 2 treatment. In the digesters, oxygen is added by two (2) air blowers to break down organic matter in the sludge. Stabilized sludge is transferred to the Biosolids Storage Tank by two (2) submersible pumps (duty and standby) (rated at 12L/s and 13 TDH) for thickening.

The Biosolids Storage Tank has a storage capacity of 950 m³ with 240 days of sludge storage capacity for seasonal storage of thickened biosolids. Here, sludge is thickened and prepared to be disposed of as biosolids and applied to agricultural land in accordance with the Nutrient Management Act.

The wastewater treatment facility (WWTP) is a Class II system and was built in 2011.

There are approximately 400 residences connected to the sanitary sewer collection system. The raw sewage flows by gravity to the #1 sewage pumping station. From there it is pumped by two submersible pumps to the Sewage Treatment Plant. The Village's collection system is Class I.

See Amended Environmental Compliance Approval Number 264-W601 attached in Schedule F. and Certificate of Approval 1121-7YRQLF attached in Schedule E.

Table 2. Wastewater Treatment System Summary Merrickville – Wolford WTS

Treatment facility description:	Collection system, pretreatment, ISAM treatment system with UV Disinfection. Sludge digestion and disposal as biosolids.
Average Daily Flow:	800 m ³ /day
Peak Flow Rate:	3800 m ³ /day
In-service date:	2011
Operated by:	Ontario Clean Water Agency OCWA
System Owner	The Corporation of the Village of Merrickville-Wolford
ECA Number (Collection System)	264-W601
Certificate of Approval (WW System)	1121-7YRQLF
System Name	Merrickville Sewage Treatment Plant

A.3 Water and Wastewater System Services

The services to be provided by the contracted Proponent for the water and wastewater systems on behalf of the Village are described in this section, including:

- Core Services. These are the services that are required to be delivered under the Water and Wastewater Services Agreement by the contracted Proponent.
- Additional services. These are the services not included in the Core Services that can be delegated to the contracted Proponent at the option of the Village to be governed under the Water and Wastewater Services Agreement using the Additional Services Request process described below.

General Routine Water and Wastewater Systems Services

These services include the labour required for the operation, routine maintenance, and management, including asset protection of the facilities. The description of the services in this RFP is for general purposes only and does not necessarily reflect the entire scope of the services to be provided by the contracted Proponent. Proponents should nevertheless address these general descriptions in their response to this RFP.

Utilities

Utility costs which include telephone, internet, security (electronic alarm system), electricity, natural gas, water, and heating fuels will be the responsibility of the Village and billed directly to the Village.

Chemicals

The supply, ordering and arranging delivery of chemicals shall be the responsibility of the Proponent. Chemical suppliers will directly bill the Village.

Vehicle Cost

The cost for transportation includes the use of vehicles to carry out the day-to-day requirements of this Contract, and all costs are the responsibility of the Proponent.

Equipment

Includes, but is not limited to office equipment, laboratory equipment, safety equipment, tools, communication equipment, maintenance equipment, mechanical equipment and manually operated equipment. An inventory of municipally owned equipment is to be provided by the successful Proponent to the Village annually. All equipment purchased under this Contract, remains the property of the Village.

Materials and Supplies

Includes, but is not limited to, office supplies, duplicating and photo supplies, medical supplies, laboratory chemicals, laboratory supplies, cleaning, personal hygiene, janitorial and maintenance supplies and other materials and supplies, are the responsibility of the Proponent.

Third Party Laboratory Analysis

Organized, coordinated, and managed and reviewed by the Proponent. The cost to courier and analyze water and wastewater samples at an accredited laboratory (in accordance with the requirements of the Safe Drinking Water Act), as required by the Safe Drinking Water Act and its regulations and the Environmental Compliance Approval(s) will be billed directly to the Village.

Outside Services

Includes, but is not limited to, equipment rentals, and other professional services will be billed directly to the Village.

Proponent (in addition to above)

- a) Any cost that is required to adhere to the applicable ECA, DWWP and MDWL
- b) Any cost that is required as a result of a Ministry, or other regulatory inspection and order that relates to the responsibilities of the operator.
- c) Postage and freight charges, printing and binding and courier services

Village (in addition to above)

- a) Any cost that is required to comply with new legislation or regulation.
- b) Anything that results in an amendment or replacement of the ECA, DWWP and MDWL
- c) Cost of third-party auditor for DWQMS conformance
- d) Cost for third-party removal and disposal of biosolids.

The Successful Proponent will be responsible for operation of the following facilities:

A.3.1 *Asset Operations Services (Core Services)*

Proponent will provide routine operations, maintenance and management of the water and wastewater systems and staff the systems with certified and skilled operators and maintenance staff, including:

- Comply with all Environmental Compliance Approval(s), Drinking Water Works Permits, Municipal Drinking Water License, Certificate of Approvals and other relevant government acts and regulations.
- Provide an Overall-Responsible-Operator (ORO) / Operator-In-Charge (OIC) to be responsible for the overall operation and management of the water systems (as per O. Reg 128/04 Sections 22 and 23: Certification of Drinking Water System Operators and Water Quality Analysts as amended to 256/05)
- Provide sufficient certified operator(s) to operate the water and wastewater systems as required under normal operating conditions on business days and during business hours to operate and manage the system in compliance with the requirements of applicable Laws and terms of the Agreement.

- Provide certified operator(s) to be on call 24 hours per day, 365 days per year to respond to emergency conditions in respect to the operations of the water and wastewater systems.
- Provide staff for overtime and call-ins to be provided as required.
- Provide training and continuing education to operations staff as required to ensure the continued safe and compliant operation of the treatment system.
- Keep a clean, healthy, and safe work environment.
- Ensure security at sites and buildings by maintaining fences, gates and locks, notifying the Village of any deficiencies.
- Review regulators' inspection deficiency reports, amending deficiencies, as approved by the Village, or negotiating amendments to deficiencies with regulator.
- Monitor and control water and wastewater systems, assets and processes using the Village's Supervisory Control and Data Acquisition (SCADA) system and other control devices and instrumentation, and/or the contracted Proponent's own SCADA system, including tuning control loops, analyzing key process parameters to identify trends, optimizing performance, and anticipating potential non-compliance events before they occur.
- Record, track and analyze key process parameters and resources consumed, including flows, energy usage (electricity and gas), chemical usage.
- Maintain daily on-site log sheets (electronic logbooks preferred) as well as operating records, including process control log sheets, sampling and laboratory log sheets and routine check lists as required by applicable Laws and as considered to be good industry practice.
- Monitor and report any significant water loss based on parameters such as flows, pressures, and elevated tank levels.
- Monitor and respond to alarms, including making any adjustments or corrections necessary to fix the cause of the alarm condition.
- Perform source/discharge, treatment, and distribution sampling for processing, including collection, preservation, packing, shipping, and tracking for off-site laboratory processing.
- Coordinate supplies of chemicals and materials with vendors
- Clean, lubricate, adjust, inspect, and perform minor repairs of water and wastewater system assets.
- Clean, calibrate and verify all meters and equipment in accordance with the system license requirements and to ensure reliable accuracy (e.g., flow meters, backflow preventers, hoist)
- Maintain any tools and equipment used to deliver the services.
- Maintain any vehicles used to deliver the services.
- Produce reports as specified in Section A3.10 below.

A.3.2 Asset Distribution and Collection Services (Core Services)

Proponent will:

- Regular checks of pumping stations and force mains to ensure proper operation and to record meter readings.
- Keep hydrants operable and compliant, including flushing, opening, exercising, and winterizing.
- Keep main distribution shut-off valves operational by exercising.
- Annual exercising of distribution valve
- Perform water shutoff/ opening as requested by the Village.
- Fire hydrant flushing (twice per year), winterization and painting (every three years)
- Annual maintenance hole inspection for infiltration, damage, and general condition.

A.3.3 Asset Maintenance Services (Core Services)

The Proponent shall provide the Village with full documentation validating that the appropriate maintenance procedures are being performed on all Village owned equipment in accordance with manufacturers' recommendations and best practices.

The Proponent must monitor and enforce all equipment warranties and perform all activities in accordance with manufacturer recommendations to preserve such warranties both those in effect on the date of the execution of the Water and Wastewater Services Agreement and those for new equipment purchased during the term of the Water and Wastewater Services Agreement.

Notwithstanding the above time frame, the Proponent will perform all the necessary maintenance at the facilities as per regulations or established industry standards and best practices from the effective date of the Services Agreement.

Maintenance categories are as follows:

Routine Maintenance

Maintenance and care of all facilities including all cleaning/janitorial, equipment adjustments, lubrication, repairs, and painting to preserve the condition and appearance of all facilities.

Preventive Maintenance

Regularly scheduled and follow-up maintenance activities, as recommended by equipment

manufacturers or using best practices, including routine inspections, warranty maintenance activities, calibration, and testing of emergency standby generators.

Routine and preventive maintenance labour costs are the Proponent's responsibility while the cost of services, materials, supplies, and replacement parts including lubricants, filters, belts and all other consumable materials (procured by Proponent) will be billed quarterly (without mark-up) to the Village.

Breakdown Maintenance

Breakdown maintenance is defined as repair, replacement or renewal of equipment or other capital items that have failed or when failure is deemed to be imminent.

The Proponent shall submit an Expenditure Request to the Village for all breakdown maintenance items in advance of conducting any work to ensure such maintenance is properly approved. If delay in any such repair, replacement or renewal of equipment would immediately compromise the applicable ECA, DWWP or MDWL, the Infrastructure and Contract Manager must be consulted prior to any work being performed and an Expenditure Request must be submitted within seventy-two (72) hours of approved repairs being completed.

Where applicable, costs for repairs and/or parts and materials by competitive quotations will be obtained by the Proponent and provided to the Village prior to consultation and approval, in coordination with Village procurement bylaw.

A.3.4 *Non-Routine (Major) Repairs, Rehabilitation and Replacement of Assets Services Supervisory Services (Core Services)*

Proponent will provide coordination and supervisory support for planned non-routine maintenance projects and initiatives for water and wastewater system assets (i.e., major repairs, rehabilitation, and replacement)

The Proponent will also provide coordination and supervisory support for unplanned non-routine maintenance (major) repairs, rehabilitation, and replacement projects (i.e., unplanned non-routing maintenance) as approved by the Village via the Additional Services process as part of Core Services.

Note: The planned and un-planned non-routine maintenance project activities (and associated costs) are considered to be Additional Services.

A.3.5 *Asset Planning Services (Core Services)*

Proponent will:

- Provide recommendations for major repairs, rehabilitation replacement and new infrastructure assets not considered to be part of routine maintenance with a business case on an annual basis to be considered by the Village for approval and inclusion in the Village's Capital Program and support its annual budgeting process.

A.3.6 *Asset Design, Construction & Commissioning Services (Core Services)*

Proponent will, referring to the Village's approved Capital Program for currently planned infrastructure projects:

- Review infrastructure asset designs from an operations and maintenance perspective as required. This includes identifying the impact of any new infrastructure on existing assets and systems and the operability and maintainability of that new infrastructure.
- Support the commissioning of any new infrastructure assets, including verifying that the new asset or group of assets complies with functional and technical design specifications from an operations and maintenance perspective, confirming operability and maintainability and identifying the impact on the existing operations and maintenance.

A.3.7 *Asset and Process Optimization Service (Core Services)*

The Proponent will provide recommendations for any asset and process optimization services that improve water or wastewater process or system efficiency, effectiveness, and performance, improve service levels to customers, or lower risks which are not included or considered to be routine operations or maintenance. The Proponent will submit a business case annually showing the costs and benefits for each recommended service to be approved by the Village. Examples of these services include:

- Process Modelling & Optimization, it can include detailed pumping system optimization analyses, demand management, energy management and detailed process and process control strategy improvements.

- Asset Modelling and Optimization, intended to optimize the life of critical assets. It includes applying predictive analytics/models to analyze the condition and performance history of major assets (e.g., pumps, chemical dosing equipment) This may require detailed assessment of equipment condition using advanced techniques (e.g., infrared thermography, vibration analysis). Results would be used in conjunction with the Asset Management and Capital Plans
- Energy Optimization, intended to better understand, manage, optimize, and report on the energy usage and related greenhouse gas emissions of the Village's Water and Wastewater Systems
- Other services as proposed by the Proponent.

A.3.8 *Management Services (Core Services)*

The Proponent will provide management services to support the delivery of its operations and maintenance services to the Village. These services include the management, administrative and relationship support services required to enable the efficient and effective delivery of water and wastewater system services to the agreed service levels. Management services are assumed to be included as part of the service offering of any operations, maintenance and management services contractor applying good industry practice. As such, they are assumed to be part of the Core Services.

Proponent will provide management, leadership, and administrative services as required to support the services in the Agreement. This will include:

- Conduct business planning in alignment with Village priorities.
- Provide leadership to staff.
- Perform operational and trend analyses.
- Maintain the Drinking Water Quality Management System up to date.
- Monitor and report on service performance.
- Review and refine service performance measures and targets.
- Perform water and wastewater system-wide operational risk management.
- Provide coordinated access and supervision to third party contractors who work on the water and wastewater systems to ensure that work is performed in an efficient and effective manner.
- Perform administrative tasks as required by the Water and Wastewater Services Agreement
- Administer the agreement with the Village.
- Perform all financial and accounting activities using generally accepted accounting principles

- (GAAP) to support the financial management requirements under the agreement, including:
- Planning, budgeting, and forecasting
 - Reporting of costs
 - Provide procurement services as necessary to support the agreement, including:
 - Order and receive materials and supplies.
 - Order and receive chemicals and organize deliveries.
 - Contract with third-party service providers to deliver subcontracted services to the Village under the agreement (e.g., contractors, consultants)
 - Adhere/align to the Village's procurement policy as a minimum standard.
 - Provide HR planning, hiring, staffing, payroll, benefits, and other HR services required to provide the services, deliver site specific training to staff operators and technicians, and plan and deliver staff CEUs and health & safety training.
 - Plan, schedule, and manage all work and resources required under the agreement, including:
 - Prioritize, assign resources/crews, schedule on-call.
 - Manage statutory holidays, vacations and time-off.
 - Coordinate with third parties (e.g., contractors, suppliers) who require site access to perform work on the systems.
 - Provide contractor orientation and health and safety instructions.
 - Review and update Standard Operating Procedures as required, including:
 - Operating manuals and procedures
 - Maintenance manuals and procedures / job plans for asset maintenance and care.
 - Regularly update the Water System Emergency plan as required under the DWQMS and in alignment with the Village's municipal Emergency Plans that includes procedures for managing Emergencies and other Uncontrollable Circumstances affecting the systems, assets and services (update at the same frequency as the Village's Plan)
 - Complete and submit 100% of reports as per Section A3.10 below.
 - Maintain and manage the inventory in coordination with the Village.
 - Provide information management services, including:
 - Manage access and physical security for Village facilities (e.g., ID cards, locks, keys)
 - Manage Proponent staff mobile devices.
 - Ensure IT security, integrity, and related activities (e.g., back-ups and recovery)
 - Collect, store, maintain, and make securely available complete and accurate data required to support the agreement, including data on:
 - Operations, maintenance, and management
 - Assets covered under the agreement.

- Work performed (e.g., operations work, maintenance work)
- Water and wastewater process and system performance
- Compliance
- Staff training (e.g., health and safety, environmental compliance, operator certification) – track testing and certification levels
- Integrate data wherever possible to improve the efficiency of reporting (e.g., lab data from external sources into compliance and performance reports)
- Meet and communicate with the Village to maintain a good working partnership between the parties, including:
 - Meet with the Village on a frequency agreed to by the parties.
 - Provide the Village with the reports and updates specified in the agreement.
 - Be responsive to the Village’s requests.
 - Promptly advise the Village of any incidents, non-compliance events, or information which could have a material bearing on the provision of the services by the Proponent.
- Provide all stakeholder relations and communication services necessary to support the requirements under the Agreement, including:
 - Attending the phone
 - Communicating and meeting with Village representatives
 - Processing internal, and client emails
 - Communicating with government agencies (e.g., Province of Ontario Ministries)
- Support the engagement of community stakeholders (e.g., by providing facility tours, making classroom appearances)
- Provide and maintain insurance as per the agreement, including for the contracted Proponent:
 - Workers' compensation insurance
 - All risk property insurance for the contracted Proponent’s property
 - Comprehensive general liability insurance
 - Proponent’s pollution insurance
 - Automobile liability for vehicles owned/leased by the contracted Proponent.
- Meet the water quality and environmental compliance obligations under all applicable Laws, including:
 - Conducting and reporting on water quality and environmental compliance related observations, inspections, audits (e.g., MECP/MOL inspections, internal audits, external audits)
 - Taking remedial action

Note: Proponent will notify the Village of a need to obtain, amend or extend regulatory approval

and support the Village in the process.

- Meet the health & safety compliance obligations under all applicable Laws (e.g., *Occupational Health and Safety Act, 1990*, *Workers' Compensation Act, 1990*, *Workplace Safety and Insurance Act, 1997*), including:
 - Conducting and reporting on health & safety related observations, inspections, audits (e.g., worksite audits) and taking remedial actions
 - Observing and reporting near misses and incidents and taking remedial actions
 - Holding incident review meetings (monthly)

A.3.9 Water Customer Services (Core Services)

- Provide and participate in community engagement events (e.g., site visits, tours, classroom visits) with community stakeholders.

A.3.10 Reporting and Information Submissions (Core Services)

The Proponent will deliver the reports and information to the Village as described below. At a minimum this will include all regulatory reports required by government regulators (e.g., MECP, MOL) under applicable Laws in addition to those requested by the Village.

Where possible:

- Reports should use operations and maintenance data extracted directly from Information and technology systems in addition to manually recorded data.
- Data and information should be presented in tables and graphs that show trends over time and monitor performance against the targets agreed to in the service level expectation.

Business Performance Reports

The Proponent will deliver business performance reports to the Village. The business performance reports will include:

- Annual confirmation of the subsequent year's key deliverables, outcomes, and milestones.
 - Key service level results, programs and initiatives, any associated deliverables, results against specific performance measures and targets

Core Services Performance Reports

The Proponent will provide reports on the core services performance on a quarterly and annual basis. The reports will focus on the Core Services delivered under this agreement, including core operations services, and core maintenance service.

- Routine operations services for water sources/discharge, treatment, distribution, and collection performance, including:
 - Month over month trends of physical, chemical and biological parameters related to water quality and compliance for raw, treated and distributed water (e.g., flows, pressures, turbidity, TDS, Ca, Mg, hardness, Na, TOC, Al, Cu, Pb)
 - Non-compliance events/incidents/accidents
 - Service interruptions and time to restore service.
 - Compliance samples / other samples taken.
 - Audits and inspections conducted (internal, external, regulator) investigations conducted.
 - Compliance reports submitted.
 - Licenses and Approvals updated, submitted.
 - Employee training held.
 - Health & safety meetings conducted.
 - Electricity usage per volume treated.
 - Chemical usage per volume treated

- Routine maintenance services of water source, treatment, distribution and collection maintenance, including:
 - Work order cycle time (work order completion rates)
 - Mix of corrective/preventive/predictive maintenance
 - Additional work scheduled and tracked using the CMMS / WMS (e.g., sampling rounds)
 - Average age and remaining life in years of key asset groups in Water Systems (e.g., water mains, water valves, pumps) – only reported annually.
 - Note: add new performance targets after program is established and running (e.g., after Year 1 or 2)

Submissions to the Village:

- Performance update (on Core Services): Quarterly
- Performance report (on Core Services): Annually by end of February for previous year

Non-Routine (Major) Maintenance Plan and Progress Performance Reports

The Proponent will deliver quarterly and annual Non-Routine Maintenance Reports describing the progress of approved non-routine maintenance services as well as approved un-planned non-routine maintenance undertaken by the contracted Proponent.

Submissions to the Village:

- Non-Routine Maintenance Update: Quarterly
- Non-Routine Maintenance Report for previous year: Annually by end of February

Regulatory Reports

The Proponent will deliver all regulatory reports required in the role of accredited Operating Authority for the drinking water systems as reflected in all applicable Laws. This includes the following:

- Safe Drinking Water Act, 2002, S.O. 2002, c. 32, s. 21 – Quality Management (Standard) System (as per the Drinking Water Quality Management Standard requirements)
- O. Reg 170/03 – Section 11 Annual Reports and Schedule 22 – Summary Reports

Event Notification and Reporting

The Proponent will promptly notify the Village (and Regulator as required) of the following events:

- Compliance violations / non-compliance events
- Treatment system has gone out of compliance with regulatory requirements.
- Water quality or environmental incidents
- Health and safety accidents
- Changes in applicable Laws (e.g., legislation, regulations) that impact the systems and services. Any modifications to the treatment, distribution or collection services or systems required to comply with any change in laws, upon which the Village will provide approval, if reasonable, to make the required modifications or changes
- Information technology event such as a breach of security or data as soon as it is discovered, along with remediation plans and strategies.

A.4 Service Levels

This section describes the general and specific service levels to which the Proponent will be expected to deliver the services. It also describes the Village's need to continue to improve delivery of water and wastewater services through the term of the Water and Wastewater Services Agreement in alignment with Village priorities and the trends and influences that will impact the Village as well as its water and wastewater services in the future.

A.4.1 *General Service Performance Standards*

- Comply with all applicable Laws including approvals.
- Employ good industry practices.
- Keep the assets in a state-of-good-repair.
- Exercise good communication

A.4.2 *Good Industry Practice*

The Proponent will consider good industry practice as the foundation of ongoing service and process improvement in alignment with the principles of the Village's QMS and DWQMS. The following practices were used as a basis for the recent Service Delivery Review and will continue to be the basis for measuring contracted Proponent performance:

- Services and operations are well-defined, planned and strategically managed.
- Costs are competitive, allocated and fully recovered through rates, fees, and charges.
- Operational workforce is experienced, focused and flexible.

- Water system assets are planned for the full life cycle and cared for and protected to optimize their service life.
- Technology solutions are essential for compliance, efficiency, and effectiveness.
- Organizational health is a long-term strategic commitment.
- Performance is managed for continuous improvement.

A.4.3 *Specific Performance Measures*

Key performance measures are provided below. The initial targets will be agreed to during final negotiations with the successful Proponent. The targets will be reviewed and may be adjusted every year as part of the annual performance reporting process.

Public Health, Water Quality and Environmental Compliance

- # of water quality compliance exceedances/yr.
- MECP inspection results
- # of water compliance samples taken, tested and analyzed
- Volumes of spills to the environment

Asset Health

- Amount of Corrective, Preventive and Predictive Maintenance performed (%)
 - Corrective / Reactive Maintenance
 - Planned / Preventive Maintenance
 - Predictive Maintenance

Client Care

- % of required reports delivered on time to the Village by the contracted Proponent (% on time)
- Time to respond to an alarm
- # of water quality complaints from customers per year (e.g., due to colour, taste and/or odour)
- # of community engagement events (facility tours, make classroom appearances, attend events)

Health and Well Being

- # of lost time incidents/year
- # of hours of training/employee/year

- # of health & safety planning meetings/year

Proponent can provide any additional specific performance measures that contribute to the Village's water and wastewater services outcomes.

A.4.4 Water and Wastewater System Resource Consumption

The main consumable resources required to operate and maintain the water and wastewater systems and asset are electricity and chemicals. It is assumed that the Proponent will make every effort to minimize the use of these resources by employing operations and control strategies that reduce the total electricity and chemicals used.

It is also assumed that if the Village's electricity provider offers time-of-day pricing options, the Proponent will use available process flexibility (e.g., manage storage in tanks or reservoirs) to shift power loads from on-peak time periods to off-peak time periods to ensure minimum overall electricity cost to the Village.

The Proponent will monitor and report on the amount of chemicals used per volume of water/wastewater treated to ensure the processes are operating as efficiently as possible (e.g., chlorine for disinfection).

A.4.5 Continuous Performance Improvement

The Proponent will submit a report on continuous performance improvement. This report will identify and schedule the following areas for improvement:

- Improve strategic business planning.
- Reduce manual and paper-intensive procedures and activities where possible.
- Use good industry practice-based maintenance to:
 - a. Identify essential equipment based on criticality and consequence of failure, and improve the application of asset condition sensors to monitor, trend and predict essential equipment and process failures for that equipment.
 - b. Achieve the optimum ratio between corrective (CM), preventive (PM) and predictive (PdM) maintenance.
 - c. Adjust preventive maintenance strategies over time from mostly time-based towards more

condition and criticality- based maintenance to ensure unnecessary maintenance work is eliminated.

- Further leverage the capabilities of the Village SCADA System and/or supplement with Proponent SCADA system to:
 - a. Enable remote monitoring and control to minimize the need to attend the facilities outside typical working hours
 - b. Improve control strategies to reduce the use of chemicals and electricity (e.g., pump optimization)
 - c. Identify energy intensive equipment and implement improvement opportunities.
- Increase use of technology tools for operators and mechanics to reduce manual work and reduce redundant data entry. This should include tools such as:
 - a. Handheld mobile solutions to enable mobile work and maintenance management, electronic logbooks, and integrated compliance reporting software.

A.5 Water and Wastewater System Assets

The water and wastewater systems and related assets owned by the Village and through which the services are to be delivered under the Agreement include:

A.5.1 *Water and Wastewater System Infrastructure Assets*

- Civil, mechanical, electrical, instrumentation assets and process equipment (e.g., equipment such as pumping systems, valves, chemical feed systems)
- Building and site assets (e.g., buildings, grounds, parking lots, access roads, fences)

A.5.2 *Enabling Assets*

The following enabling assets will be agreed at the start of the Water and Wastewater Services Agreement based on an inventory review with the Proponent:

- Parts and equipment (e.g., flow monitoring equipment, process laboratory equipment, emergency generators, emergency radios & headsets)
- Information, technology and telecommunications hardware, equipment, software
- Consumables and supplies (e.g., treatment chemicals, lab chemicals, cleaning supplies)

- Furniture and fixtures (e.g., desks, chairs at water treatment facilities)

A.6 Additional Services

Additional Services are the services under the Water and Wastewater Services Agreement for which responsibility has been delegated to the Proponent by the Village in addition to Core Services. These Additional Services will be initiated and defined using the Village's Service Request, Quotation and Approval processes.

A.6.1 *Additional Services Request Process – General*

The process for assigning any Additional Services for the water and wastewater systems to the Proponent will be done through a *Service Request* as follows:

1. Village:
 - a. Completes a service request form that includes description of project, scope of services and schedule.
2. Proponent:
 - a. Reviews the proposed additional services requested, estimates the fees (i.e., Proponent costs to be estimated on a Time and Materials basis according to Part B - Pricing Submission)
 - b. Obtains quotes from subcontractors, suppliers, or vendors, and if necessary, adds those quotes to the estimate of Proponent's time and materials costs, attaches those quotes to the service request.
 - c. Discusses any additional clarifying information with the Village.
 - d. Signs and submits the quotation to the Village.
3. Village
 - a. Reviews and approves the proposed Additional Service and quotation.
 - b. Files the copy of the approved service request
4. Proponent
 - a. Delivers the Additional Services as described in the service request as amended.
 - b. Invoices the Village for the Additional Service

SCHEDULE B: INSURANCE REQUIREMENTS

A summary of the insurance coverage that the Proponent will provide throughout the Initial Term of the Water and Wastewater Services Agreement and any Renewal Term in respect of the water and wastewater services, systems and related assets is described below:

- Workers' Compensation Insurance

Workers' Compensation Insurance as required under applicable Law.

- Comprehensive Boiler & Machinery Insurance

Comprehensive boiler and machinery insurance in the name of the Proponent insuring the Equipment and related assets used to deliver the Services, including:

- The cost of breakdown, repair, rehabilitation, and replacement thereof.

The policy shall:

- Loss payee as a beneficiary.
- Contain a waiver of subrogation to the benefit of the Village and its employees.
- Have a coverage limit typical for Comprehensive Boiler & Machinery Insurance.
- Have a deductible limit not greater than Ten Thousand (\$10,000) Dollars per occurrence.

- Commercial General Liability Insurance

Commercial General Liability Insurance in the name of the Proponent insuring the Proponent's liabilities arising out of bodily injury, death, or property damage, including loss of use, occurring on, in or about the assets and systems used in the delivery of the Water and Wastewater Services Agreement, including:

- Contractual liability (including contractual liability with the Village) for sudden and accidental pollution arising from the negligence of the Proponent.
- Cross liability extensions

The policy shall:

- Name the Village as an additional assured, but only in respect of legal liabilities related to the water and wastewater services delivered by the Proponent.
- Contain a waiver of subrogation to the benefit of the Village and its employees.
- Have a coverage limit not less than Five Million (\$5,000,000) Dollars per occurrence.

- Contractors Pollution Liability Insurance

Pollution liability Insurance in the name of the Proponent insuring pollution events for which the Proponent is legally liable, including:

- Events caused by the Proponent that result in bodily injury and/or property damage.
- Events caused by the Proponent that require remediation activities.

The policy shall:

- Have a coverage limit not less than Five Million (\$5,000,000) Dollars per claim.

- Professional Liability Insurance

Professional liability insurance in the name of the Proponent insuring the errors and omissions committed in the course of delivering the water and wastewater services.

The policy shall:

- Have a coverage limit not less than Five Million (\$5,000,000) Dollars per claim.

- Automobile Liability Insurance

Automobile liability insurance in the name of the Proponent insuring all vehicles owned and registered or leased in the name of the Proponent used to deliver the water and wastewater services.

The policy shall:

- Have a coverage limit not less than Two Million (\$2,000,000) Dollars combined limit.



SCHEDULE C: PROCUREMENT OF GOODS AND SERVICES



MERRICKVILLE-WOLFORD
Jewel of the Rideau

Purchasing and Procurement Policy

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1. PURPOSES, GOALS & OBJECTIVES

The purposes, goals and objectives of this Policy are:

- a) To protect the interests of the Village, the public and persons participating in the procurement process and to establish purchasing policies to ensure the most cost-effective methods are used to purchase goods and services by the Village. This will be accomplished by reinforcing fairness, openness, transparency and integrity, and by adopting consistent and standard approaches for all stages of the Village's procurement processes;
- b) To promote where applicable in purchasing activities of the Village, the requirements of the *Accessibility for Ontarians with Disabilities Act, 2005*, SO 2005, c 11;
- c) To monitor all purchases within current control resources and to maximize savings to the taxpayers; and
- d) To standardize the procurement of goods and services wherever possible, to meet the following objectives:
 - To allow for reduced number of goods and services required;
 - To maximize volume buying opportunities;
 - To provide economies of scale;
 - To reduce handling, training and storage costs;
 - To minimizing maintenance costs;
 - To reduce overall cost; and
 - To leverage value.

2. DEFINITIONS

Wherever a word is used in this Policy with its first letter capitalized, the term is being used as it is defined in this section. Where any word appears in ordinary case, its regularly applied meaning in the English language is intended.

- a) **“Appropriated”** means the provision of funds in the annual budget. Where Council has not yet adopted a budget for the current year, an expenditure shall be deemed to be appropriate if the expenditure is for daily operations and routine maintenance, and does not exceed the budget from the previous year.
- b) **“Award”, “Awarded” and “Awarding”** means authorization to proceed with the purchase of goods, services or construction from one or more selected suppliers or contractors.
- c) **“Best Value”** means the optimal balance of performance and cost as determined by the decision-maker and in accordance with any pre-determined evaluation plan.

- d) **"Bid"** means an offer or submission from a bidder in response to a Request for Quotation, Request for Tender, or Request for Proposal in accordance with the terms and conditions of the Village's bid documents.
- e) **"Bidder"** means one who submits a response to a call for a bid.
- f) **"Bid Deposit"** means the form of security required by the terms and conditions of Bid Solicitations to guarantee that the successful supplier enters into a Contract with the Village.
- g) **"Bid Irregularity"** means a deviation between the requirements of a bid request and the information provided in a bid response (see Appendix B).
- h) **"Bid Solicitation"** means a formal request for Bids including a Request for Quotation, Request for Tender, or Request for Proposal.
- i) **"Budget"** means the budget or portion of the budget approved by Council.
- j) **"Chief Administrative Officer"** or **"CAO"** means the Chief Administrative Officer of the Corporation of the Village of Merrickville-Wolford, who also has the discretion and authority to act as a Department Head.
- k) **"Compliant Bid"** means a Bid that meets the terms and conditions of the Bid Solicitation and this Policy.
- l) **"Conflict of Interest"** means a situation where a personal, business or other interest of an elected or appointed official, officer or employee of the Village is, or can be reasonably perceived to be, in conflict with the interests of the Village, and includes, but is not limited to:
 - i) the giving or receiving of a direct or indirect personal gain or benefit, or a direct or indirect advantage or privilege, by any person or business that offers goods and/or services to the Village;
 - ii) a direct or indirect interest in any business that provides goods and/ or services to the Village; and
 - iii) a situation in which private interests or personal considerations may affect an elected or appointed official, officer or employee's judgment in acting in the best interest of the Village.
- m) **"Construction"** means the process of utilizing labour to build, alter, repair, improve or demolish any structure, building or public improvement, and generally does not apply to routine maintenance, repair or operations of existing real property.
- n) **"Contract"** shall mean a legally binding agreement, enforceable by the courts, between two or more parties that creates an obligation to provide defined goods and/or perform defined services in exchange for some consideration.

- o) **“Council”** means the Council for the Corporation of the Village of Merrickville-Wolford.
- p) **“Department Head”** means an employee who holds operational responsibility for a municipal function or service identified as a department in the Village’s organization chart. Where responsibility for a function or service cannot be ascribed to a Department Head, this definition shall be deemed to mean the CAO.
- q) **“Designate”** means a person authorized in writing by the Department Head or CAO, or as described in staff job description(s), employment contracts or Village human resources Policy, to act on their behalf, for the purpose of this Policy.
- r) **“Disability”** or **“Disabilities”** shall have the same meaning as set out in the *Accessibility for Ontarians with Disabilities Act, [2005](#), SO 2005, c 11*, or any successor legislation thereto.
- s) **“Emergency”** shall mean a situation where, in the opinion of the CAO, the purchase of goods and services requires immediate action to prevent or correct dangerous or potentially dangerous safety conditions, to protect the Village against heightened liability, or ensure the safety of the public as a result of a sudden unexpected event.
- t) **“Expression of Interest”** shall mean a situation where vendors are solicited by the Village to advise the Village of their ability or desire to undertake municipal requirements.
- u) **“Goods”** means, in relation to procurement, moveable property (including the costs of installing, operating, maintaining or manufacturing such moveable property), including raw materials, products, equipment and other physical objects of every kind and description whether in solid, liquid, gaseous or electronic form, unless they are procured as part of a general construction contract.
- v) **“Lowest Compliant Bid”** means the Compliant Bid that would provide the Village with the desired goods and/or services at the lowest cost. The lowest or any compliant bid may not necessarily be accepted.
- w) **“Normal Operating Expenditure”** means an expenditure of an operational, recurring nature and does not include one-time special or capital expenditures.
- x) **“Professional Services”** means those services requiring the skills of professionals for a designated service requirement including:
 - i) architects, engineers, designers, surveyors, geoscientists, project managers, financial consultants, auditors, accountants, doctors, dentists and lawyers;

- ii) firms or individuals having specialized competence in environmental, planning, human resources or similar disciplines; and
 - iii) software consultants and any other persons providing IT and similar services.
- y) **"Promotional Material"** are products branded with a logo or slogan and distributed at no cost to promote the brand. These products include note pads, mugs, pens, key chains and other small items valued at under \$20.00.
 - z) **"Proponent"** means one who submits a response to a Request for Proposal, Request for Tender or Request for Quote. This term can be used interchangeably with **"Bidder"**.
 - aa) **"Proposal"** means the submission received or the response to a Request for Proposal, acceptance of which may be subject to further negotiation.
 - bb) **"Purchase"** means to acquire goods and/or services by purchase, rental, lease or trade.
 - cc) **"Quote"** means a submission to the Village in response to a request for the cost of providing goods, services or construction to the Village, for purchases under \$15,001.
 - dd) **"Request for Expression of Interest" or "RFEOI"** means a public request made by the Village seeking responses from potential suppliers for the purpose of compiling a roster of suppliers who may be interested in providing goods and/or services to the Village from time to time. Receipt of an expression of interest by the Village does not create any obligation between the potential supplier and the Village, but may be a precondition to qualifying for subsequent Bid Solicitations issued by the Village.
 - ee) **"Request for Pre-Qualification" or "RFPQ"** means a public request by the Village seeking submissions outlining the experience, financial strength, education, background and significant personnel of potential suppliers, to create a roster of suppliers who may, from time to time, qualify to supply goods and/or services to the Village.
 - ff) **"Request for Proposal" or "RFP"** means a request for proposals from Proponents for goods, services or construction and is generally based on providing a solution to objectives stated within applicable terms of reference. The request document must clearly state the evaluation criteria; price may not be the primary evaluation factor when making a recommendation to award the contract.
 - gg) **"Request for Quotation" or "RFQ"** means a public request for quotation for the provision of goods, services or construction to the Village based on defined requirements and where a clear solution exists.
 - hh) **"Request for Tender" or "RFT"** means a public request for tenders for the provision of goods, services or construction to the Village based on defined

requirements and where a clear solution exists.

- ii) **"Services"** means intangible products that do not have a physical presence and includes professional services. No transfer of possession or ownership takes place when services are sold and they: 1) cannot be stored or transported; 2) are instantly perishable; and 3) come into existence at the time they are bought and consumed.
- jj) **"Single Source"** means the non-competitive procurement process to acquire goods and/or services from a specific supplier even though there may be more than one supplier capable of delivery of the same goods and/or services.
- kk) **"Sole Source"** means there is only one source of the goods and/or services that meets the requirements of the Village.

ll) **"Special Circumstance"** means:

- i) An event that is exceptional or could not be foreseen and is likely to pose a threat to the health, safety or welfare of the public;
- ii) An event that, unless immediately addressed is likely to cause significant loss or damage to property;
- iii) An event that has disrupted any essential service that needs to be re-established without delay; or
- iv) An Emergency.

mm) **"Tender"** means an offer submitted to the Village in response to a formal request for the cost of providing goods, services or construction to the Village.

nn) **"Tenderers"** means a person, agent, company or other entity that formally responds to a call for tenders by submitting a price to do the work or provide the product.

oo) **"Village"** means the Village of Merrickville-Wolford.

3. SCOPE

This Policy will be applicable to all departments of the Village.

4. PROCUREMENT PRINCIPLES

The following principles are intended to protect the integrity of the procurement process, to prevent unauthorized spending and to minimize risks to the procurement activities of the Village.

4.1 TRANSPARENCY

The procurement process must be transparent. Openness and transparency refer to clarity and disclosure about the process for arriving at

procurement decisions. Policies that promote openness and transparency are to be governed by legal considerations with respect to confidentiality and protection of privacy.

4.2. EFFICIENCY

Efficiency measures the quality, cost and amount of goods and services procured as compared to the time, money and effort used to procure them.

4.3. EFFECTIVENESS

Effectiveness refers to the extent to which the procurement process is achieving its desired results in terms of meeting the needs of the Village.

4.4. FAIRNESS AND CONSISTENCY

Fairness and consistency will be promoted in the treatment of prospective suppliers to avoid discriminatory practices.

4.5. OBJECTIVITY

The procurement of goods and services will be approached in an objective and unbiased way that is not influenced by personal or private interests.

4.6. VALUE

All purchasing decisions must consider the Best Value in terms of price, quality, risk, service and contribution to the operations of the Village. Value means the advantage or gain that the Village derives from the item or service.

4.7. LEGAL COMPLIANCE

Purchasing and procurement activities must comply with all Federal and Provincial laws and regulations.

5. COMPLAINTS

Any complaints from a supplier or potential supplier concerning any aspect of the procurement process shall be submitted in writing to the appropriate Department Head, with a copy to the CAO and the Treasurer. The Treasurer shall investigate and resolve the matter and may refer the matter to Council, at his/her discretion.

6. INTERPRETATION

6.1. Wherever this Policy refers to a person or thing with reference to gender or the gender neutral, the intention is to read the Policy with the gender applicable to the circumstances.

6.2. Schedule "A" – Purchasing Exemptions is incorporated into this Policy.

6.3. Schedule "B" - Chart of Bid Irregularities is incorporated into this Policy.

6.4. Schedule "C" - Purchasing and Execution Authority is incorporated into this Policy.

6.5. Schedule "D" – RFP Completion and Submission Requirements

7. RESPONSIBILITY AND AUTHORITY

- 7.1. Every person who purchases goods and services shall exercise that authority in a responsible manner consistent with public purchasing practices and procedures and in accordance with the applicable laws of the Province of Ontario, the Government of Canada and the regulations made pursuant to this Policy. All purchases must be approved by the Department Head or their Designate, and CAO where required by this Policy.
- 7.2. Committees and individual members of Council have no spending authority, and cannot enter into purchase or service agreements. Any expenses incurred must be pre-approved by the Treasurer.
- 7.3. The methods of purchasing outlined in this Policy shall not apply to the purchase of those goods and services outlined in Schedule "A". Authority for the purchases of goods and services outlined in Schedule "A" is not required to be governed by this Policy as long as the funding is available in the Budget.
- 7.4. The exercise of authority to award a contract is subject to the identification and availability of sufficient funds in appropriate accounts within Council's approved Budget.
- 7.5. Where goods and services are routinely purchased or leased on a multi-year basis, the exercise of authority to award a contract is subject to:
 - a) The identification and availability of sufficient funds in appropriate accounts for the current year within Council approved Budgets; and
 - b) Confirmation by the Treasurer that the required funding can be reasonably expected to be made available in future years.
- 7.6. Expenditures are authorized by Council through adoption of the annual budget. Prior to budget adoption, departments are authorized to expend funds at the previous years' service levels.
- 7.7. The Department Head has the authority to award contracts in the circumstances specified in this Policy provided that delegated authority is exercised within the limits prescribed.
- 7.8. The Department Head and/or CAO is responsible for ensuring that all purchasing commitments represent good value for the Village and comply with all policies of the Village.
- 7.9. The Treasurer shall monitor compliance with these policies and shall inform the Chief Administrative Officer when non-compliance has occurred.
- 7.10. For purchases not included in the approved budget, or for items that are expected to exceed the approved budgeted amount by \$5000.00 or more, the following procedures are required:

- a) The Department Head must notify the Treasurer and receive the approval of the CAO before proceeding; and
- b) The Department Head will take a report to Council, outlining the proposed purchase or overage, the reason for it, along with how the purchase or overage will be funded.

8. ACCESSIBILITY

- 8.1. Pursuant to the *Accessibility for Ontarians with Disabilities Act, 2005*, SO 2005, c 11, as amended, in deciding to purchase goods or services, the Village will have regard for persons with disability. The Village is committed to accessibility principles and is taking steps to improve accessibility in accordance with the *Ontarians with Disabilities Act, 2005*, SO 2005, c 11.
- 8.2. Suppliers and contractors providing service to the Village may, as required by the *Accessibility for Ontarians with Disabilities Act, 2005* or subsequent legislation, be required to sign a "Third Party Declaration" related to their training in accessibility requirements.

9. ADVERTISING OF PURCHASING OPPORTUNITIES

- 9.1. Purchases requiring an RFP, RFQ or RFT shall, at a minimum, be advertised:
 - a) On the Village's website from the date that the Bid Solicitation is issued up to and including the date on which the Bid Solicitation closes; and/or
 - b) One time, at least seven (7) calendar days before the Bid Solicitation closes, in a local newspaper that has circulation within the Village.

10. CANCELLATION OF REQUEST FOR QUOTATION, PROPOSAL OR TENDER

A Department Head, with the concurrence of the CAO, or the CAO individually, may cancel a Request for Quotation, Proposal or Tender at any time up to contract award, and shall ensure that the confidentiality of any bid submitted is maintained in accordance with the provisions of the *Municipal Freedom of Information and Protection of Privacy Act* RSO 1990 c. M.56, as amended ("MFIPPA").

11. REQUEST FOR PRE-QUALIFICATION OF ACCEPTABLE SUPPLIERS

- 11.1. The Village may conduct a Request for Pre-Qualification (RFPQ) to develop a list of suppliers that may be eligible to submit a Bid on subsequent Bid Solicitations or to develop a roster of suppliers for professional services.
- 11.2. Pre-Qualification may be considered in the following circumstances:
 - a) The work will require substantial project management by the Village and could result in substantial cost to the Village if the supplier is not

appropriately experienced;

- b) The goods and/or services to be purchased must meet national safety standards;
- c) The work involves complex, multi-disciplinary activities, specialized expertise, equipment, materials or financial requirements;
- d) Miscellaneous repairs and services as are required by the Village such as plumbers, electricians, locksmiths and drywall contractors;
- e) There could be substantial impact on the Village 's operations if the work is not satisfactorily performed the first time; or
- f) Any other circumstances deemed appropriate by the CAO or Department Head.

11.3. An RFPQ shall be provided to potential suppliers identified by the Department Head, which sets out the criteria for prequalification which may include, but are not limited to:

- a) Experience on similar work (firm and staff assigned);
- b) References provided from other customers for similar work;
- c) Verification of applicable licences and certificates;
- d) Health and safety policies and staff training; and
- e) Financial capability.

11.4. Supplier submissions will be evaluated and ranked and a short list of pre-qualified suppliers will be invited to participate in the second step of the two-step purchasing process being a Request for Proposal or a Request for Tender.

11.5. An RFPQ is not a legal offer but only an invitation for suppliers to make offers to the Village.

12. DIRECT PURCHASES - (NON-COMPETITIVE) PURCHASES OF \$0 TO \$2500.00 (EXCLUDING HST)

12.1. A non-competitive procurement process shall be permitted where the valuation of the purchase is \$2,500.00 or less, excluding HST, so as to allow for procurement of lower value goods and services in an efficient and timely manner without seeking competitive pricing.

12.2. The CAO, Department Head and/or Designate shall have authority to make purchases where the required goods or service can be specified, and are of a value of \$2,500.00 (excluding HST) or less as stated above and may be

acquired by direct purchase without formally seeking comparative bids, although informal comparative pricing is encouraged.

- 12.3. All disbursements shall be evidenced by invoices approved by the CAO, Department Head or Designate.

Only purchases that can be demonstrated to have been made at or below fair market value shall be made.

13. LOWER VALUE PURCHASES – PURCHASES OF \$2,501.00 - \$5,000.00 (EXCLUDING HST)

- 13.1. The CAO, Department Head and/or Designate shall have authority to make purchases to meet the requirements of the Village for the acquisition of goods, services or construction having a value of \$2501.00 - \$5,000.00.
- 13.2. The user department shall obtain 3 Quotes for the required item through vendor advertising, telephone, fax, catalogue, internet, or other means, where possible and practicable. The Department shall keep a record of such Quotes.
- 13.3. Only purchases that can be demonstrated to have been made at fair market value shall be made.
- 13.4. All disbursements shall be evidenced by invoices approved by the CAO, Department Head or Designate.

14. MID-RANGE PURCHASES BETWEEN \$5,001.00 AND \$15,000.00 (EXCLUDING HST)

- 14.1. Purchases estimated between \$5,001.00 and \$15,000.00 shall be handled by the CAO, Department Head, or Designate, obtaining a minimum of 3 written Quotes where possible and practicable, which shall be evaluated on overall cost, Best Value, and the criteria outlined in the quote request. The Department Head shall keep a record of such quotations.
- 14.2. Quotes need not be obtained if the purchase qualifies for Single Source or Sole Source purchases.
- 14.3. All disbursements shall be evidenced by invoices approved by the CAO, Department Head or Designate.

15. HIGH VALUE PURCHASES BETWEEN \$15,001.00 AND \$50,000.00 (EXCLUDING HST)

- 15.1. The CAO, Department Head or Designate shall issue a Request for Quotation (RFQ) which shall include the following information:
 - a) The specifications for the goods and services required;

- b) The name and address of the Village and person to whom the Bids should be directed;
 - c) The date and time of closing for the receiving of sealed Bids; and
 - d) Required delivery date, if applicable.
- 15.2. Bids received by the Village must be submitted and received in the manner as specified in the bid document, and include specifications of products/services, supplier's company name, name of individual receiving RFQ, date, amount and delivery date.
- 15.3. The winning Bid shall be selected based on the Best Value to the Village. The Bidder acknowledges that the Village shall have the right to reject any, or all, RFQ for any reason, or to accept any RFQ which the Village in its sole unfettered discretion deems most advantageous to itself. The lowest bid will not necessarily be accepted.
- 15.4. In the instance a Bid provides for a deviation between the requirements of an RFQ and a Bid, the Bid Irregularities listed at Schedule "B" shall be applied.
- 15.5. If only one Bid is received, the Village may exercise its right to cancel the RFQ or may accept the bid, at its discretion.
- 15.6. Bids may be opened in public by representatives from the department. Prices are disclosed unless protected under legislation. Members of the public attending the opening will record their name on a sign in sheet.
- 15.7. No report to Council is necessary provided that the expenditure is within budget, unless otherwise determined by the CAO.
- 15.8. Bids shall remain confidential until after the date and time of closing.
- 15.9. All disbursements shall be evidenced by invoices approved by the CAO, Department Head or Designate.

16. HIGH VALUE REQUEST FOR TENDER – PURCHASES \$50,001.00 AND OVER (EXCLUDING HST)

- 16.1. A Request for Tender shall be used for purchases exceeding \$50,001.00 (excluding HST) where all the following criteria apply:
- a) Two or more sources are considered capable of supplying the requirement;
 - b) The requirement is adequately defined to permit the evaluation of tenders against clearly stated criteria;
 - c) The market conditions are such that tenders can be submitted on a

common pricing basis;

- d) Sufficient funds are available and identified in appropriate accounts within Council approved budgets, except in an emergency situation;
- e) Any Bid irregularities shall be dealt with in accordance with Schedule "B"; and
- f) The provisions of this Policy are complied with.

- 16.2. The CAO or Department shall prepare and publish the advertisement as outlined at section 9 of this Policy.
- 16.3. Tenders received by the Village must be submitted and received in the manner as specified in the bid document, and include specifications of products/services, supplier's company name, name of individual receiving tender, date, amount and delivery date.
- 16.4. If only one tender is received, the Village has the option of not opening the bid and closing the call for tender.
- 16.5. Tenders received are opened in the presence of the Department Head or Designate, Treasurer or Designate as well as anyone from the general public. Members of the public attending the opening will record their name on a sign in sheet.
- 16.6. The winning bid shall be selected based on the Best Value to the Village. The Bidder acknowledges that the Village shall have the right to reject any, or all, tenders for any reason, or to accept any tender which the Village in its sole unfettered discretion deems most advantageous to itself. The lowest tender will not necessarily be accepted.
- 16.7. Tenders are reviewed by the applicable staff/consultant and a written report prepared and presented to Council recommending the award of the contract to the supplier meeting all mandatory requirements and providing Best Value as stipulated in the Request for Tender.
- 16.8. The contract will then be awarded by Council.
- 16.9. The Department Head is responsible for obtaining current insurance certificates, WSIB certificates, and performance bonds, as called for in the bid documents.
- 16.10. The original agreement shall be sent to the Clerk for filing with the minutes and bylaws of the Village.
- 16.11. The original performance bond and a copy of the agreement shall be sent to Treasury.
- 16.12. All disbursements shall be evidenced by invoices approved by the CAO, Department Head or Designate.

17. REQUEST FOR PROPOSAL – (MAY INCLUDE THE ENGAGEMENT OF PROFESSIONAL & CONSULTING SERVICES & MAY BE OF ANY DOLLAR VALUE)

In certain instances, when the requirements for goods and/or services cannot be definitively specified, a Request for Proposal is used. An RFP is an invitation to enter into negotiations. The process involves solicitation of proposals from interested and qualified vendors or consultants, by invitation or advertisement. If and when the successful party is chosen, they have been granted the opportunity to negotiate with the Village for the work, but they have not yet been awarded the contract. An RFP is used in conjunction with strong evaluation criteria that includes but is not limited to price. Schedule D outlines the RFP requirements.

- 17.1. A request for proposals shall be issued where the goods, services or construction cannot be specifically defined and it is anticipated that bidders may propose a variety of alternatives to fulfill the Village`s requirements.
- 17.2. All RFPs shall clearly set out evaluation criteria and weightings on a pre-determined point system upon which an award of the RFP may be made.
- 17.3. The RFP shall clearly indicate those needs which have been determined and which will have to be fulfilled by the successful proponent. For example, the proposal shall clearly state mandatory criteria that are project related and weighted criteria such as qualifications and the approach. The CAO, Department Head or Designate shall be responsible for establishing such criteria.
- 17.4. The RFP shall not be construed as a contract to purchase goods and services and the Village is not bound to accept the lowest price submitted. Price may not be the primary evaluation factor and subsequent award recommendation.
- 17.5. RFPs are not formally opened in public.
- 17.6. The advertisement and approval processes, will be subject to the limits and guidelines established in sections 14, 15 and 16, depending on the value of the RFP.

18. SPECIAL CIRCUMSTANCE PURCHASES

- 18.1. Purchases that are required to respond to a Special Circumstance, as defined in this Policy, shall be authorized in accordance with Schedule "C".
- 18.2. All such purchases must be reported to the Treasurer and the CAO the following business day and all purchases must have written evidence of approval from the CAO.

- 18.3. Contracts required to effect Special Circumstance purchases shall be signed in accordance with the Document Execution Authorities set out in Schedule "C".
- 18.4. The CAO may enter into a contract for the provision of services under a qualifying special circumstance. Any contractual agreements must then be approved by Council at its next Council meeting.
- 18.5. Where an emergency exists requiring the immediate procurement of goods, services and construction and time does not permit the Department Head and/or CAO to follow normal purchasing activities to acquire such goods and services, the CAO may authorize the purchase required by the most expedient and economical means, without following the purchasing by-law.
- 18.6. When such action is taken as outlined above, the Department Head or Designate and/or CAO shall report such action to Council forthwith, if the amount is outside the budget allotment.

19. SINGLE SOURCE PURCHASES

19.1. SINGLE SOURCE PROCUREMENT

Purchase of goods or services and direct appointment of a consulting professional by negotiation with a single vendor or consultant may be permitted, if it is deemed in the best interest of the Village, it has the written approval of the CAO and Treasurer before proceeding, and in the judgment of the Department Head any of the following conditions apply:

- a) The goods and services are in short supply due to market conditions;
- b) In the case of professional and consulting services, specialized expertise is required which is not available from more than one professional/consultant, or the issue is a continuation or recurrence of a previous issue;
- c) The sources of supply are restricted to the extent that there is not effective price competition, or consideration of substitutes is precluded due to any of the following:
 - i. Components or replacement parts for which there is no substitute;
 - ii. Compatibility with an existing product, facility or service is required;
or
 - iii. Specific standards are adopted by Council;
- d) There is documented evidence that the extension or reinstatement of an existing contract would prove most cost effective or beneficial;

- e) Work is required at a location where a contractor or professional has already been secured through a tender process, with established unit prices by another party and it is considered to be beneficial and cost effective to extend the unit prices for the work to be completed for the Village;
- f) The project is a multi-year contract;
- g) Only one bid/proposal is received through the procurement process and it is impractical to recall the requirements of the call for quotations/proposals. After the process has closed, it may be necessary for discussion to occur to clarify and/or make revisions to the initially defined requirements of the call for quotations/ proposals; or
- h) The nature of the requirement is such that it would not be in the public interest to solicit competitive Bids, as in the case of security or confidential matters.

19.2. **SOLE SOURCE PROCUREMENT**

Sole source procurement may be permitted if a specialized item/ service is required which is only available from one vendor. The requisitioning department will require the written approval of the CAO and Treasurer before proceeding. All purchases shall be authorized in accordance with the Purchasing Authorities set out in Schedule "C" based on the dollar value of the sole source procurement and all Contracts shall be signed in accordance with the Document Execution Authorities set out in Schedule "C" (again, based on the dollar value of the sole source procurement).

19.3. **EXCEPTIONAL ALTERNATIVE/NEGOTIATION METHOD**

A formal Bid Solicitation process may be waived and the CAO, a Department Head or Designate may purchase by negotiation with one (1) or more suppliers under the following conditions:

- a) The required goods and/or services are in short supply;
- b) Competition is precluded due to the existence of any patent right, copyright, technical secret or control of raw material;
- c) A Sole Source is being recommended;
- d) Two (2) or more identical Bids are received;
- e) The Lowest Compliant Bid received meeting all specifications exceeds the Budget amount;
- f) The extension of an existing Contract would be more effective;

- g) Only one (1) Bid is received in response to a Bid Solicitation;
- h) The Bid Solicitation process has been cancelled without Award;
- i) A roster for professional services has been developed; or
- j) There is Council authorization to do so.

All purchases shall be authorized in accordance with the Purchasing Authorities set out in Schedule "C" and all Contracts shall be signed in accordance with the Document Execution Authorities set out in Schedule "C".

20. PETTY CASH

- 20.1. Cash purchases (petty cash) may be used by staff in accordance with established procedures and where the value is less than \$50.00.
- 20.2. Cash purchases are not to be split to bypass the transaction dollar limit.

21. CO-OPERATIVE PURCHASING

The Village may enter into arrangements with any government body, ministry, agency, board, corporation or authority on a co-operative or joint basis for purchases of goods and/or services where there are economic advantages in doing so and such purchases comply with this Policy.

22. CORPORATE CREDIT CARDS

- 22.1 Corporate credit cards may be issued to Department Heads upon CAO approval. Credit cards are to be used in compliance with the Procurement Policy and the issuing creditor's terms and conditions. The credit card is the property of the Village.
- 22.2 Corporate credit cards can only be used to conduct official municipal business and only where the normal procurement process is impractical, or in the case of emergencies. Credit cards may be used to arrange registration, accommodations and travel for municipal training and conferences, but only if attendance at the training and conference has been approved in advance by the CAO.
- 22.3 Elected Officials are not permitted to have a corporate credit card.
- 22.4 The cardholder will be subject to a card limit of \$3000 or less.
- 22.5 Monthly statements will be provided to card holders by Finance staff and all credit card transactions must be reconciled with original receipts and returned to the Finance Department as soon as possible.
- 22.6 The cardholder is responsible for immediately reporting a lost or stolen credit card first to the credit card company, and secondly to the Treasurer.

- 22.7 Under no circumstances may the corporate credit card be used for personal purchases or cash advances.
- 22.8 Failure of the cardholder to adhere to the provisions and regulations of the corporate credit card may result in the loss of privileges and/or disciplinary action up to and including termination for cause in accordance with the Village's human resources Policy.

23. TENDER AND CONTRACT ADMINISTRATION

23.1. FINANCIAL SECURITIES AND INSURANCE

- i. The Village may require that a Bid be accompanied by a Bid Deposit or other similar security to guarantee that the successful supplier enters into a Contract with the Village.
- ii. In addition to the security referred to above, the successful supplier may also be required to provide:
 - a) A performance bond to guarantee the performance of the Contract;
 - b) A labour and materials bond to guarantee the payment for labour and materials to be supplied in connection with a Contract; and/or
 - c) Such further security as the CAO or Department Head deems appropriate in the circumstances.
- iii. Prior to the commencement of work, the supplier shall provide to the Village, proof of insurance in accordance with the Bid Solicitation, satisfactory to the Department Head.
- iv. Failure to comply with all terms and conditions of a Bid Solicitation, including, but not limited to, failure to provide proof of insurance as required, shall be just cause for cancellation of the Award.
- v. Prior to the Village issuing payment to a supplier and before any work commences, the supplier shall provide a Certificate of Clearance from the Workplace Safety and Insurance Board confirming all premiums or levies have been paid to the Board to date.

23.2. BID IRREGULARITIES

The process for administering irregularities contained in Bids pertaining to all Bid Solicitations shall be as set out in Schedule "B".

23.3. FORM OF CONTRACT

- i. A formal written agreement satisfactory to the CAO or Treasurer shall be used when the resulting Contract is of significant value, exceeding \$50,001. This requirement may be waived at the discretion of the CAO or Treasurer.

- ii. It shall be the responsibility of the Department Head, in consultation with the CAO or Treasurer, to determine if it is in the best interest of the Village to establish a formal written agreement with the supplier.
- iii. Where it is recommended that a written agreement be executed, it will be authorized by:
 - a) the Head of Council and CAO after being approved by Council for contracts over \$50,000; and
 - b) the Department Head and/or CAO for contracts under \$50,000.

23.4. SUPPLIER PERFORMANCE

- i. The Department Head, or Designate, shall monitor and document the performance of suppliers providing goods and/or services to that department. The Department Head, Treasurer and CAO shall be notified in writing when the performance of a supplier has been unsatisfactory.
- ii. The Village may, at the discretion of the CAO, disqualify a supplier from bidding on any Bid Solicitation or reject a Bid if a supplier:
 - a) Has, at any time, threatened, commenced or engaged in legal claims or litigation against the Village;
 - b) Is involved in a claim or litigation initiated by the Village;
 - c) Previously provided goods and/or services to the Village in an unsatisfactory manner;
 - d) Has failed to satisfy an outstanding debt to the Village;
 - e) Has a history of illegitimate, frivolous, unreasonable or invalid claims;
 - f) Provides incomplete, unrepresentative references or receives unsatisfactory external and/or internal references in a reference check undertaken by the Village.
 - g) Has engaged in conduct that leads the Village to determine that it would not be in the Village's best interests to accept the Bid.

23.5. SUBMISSION OF TENDERS AND PROPOSALS

Sealed tenders or proposals, clearly marked as to contents, shall be accepted. Tenders or proposals by facsimile or in electronic form will not be accepted, unless specified in the tender or proposal bid solicitation.

23.6. ENVIRONMENTALLY SOUND ACQUISITIONS

Departments will, when possible, endeavor to include specifications in Bid Solicitations that provide for energy efficient products, reusable products and products that contain the minimum level of post-consumer waste and/or maximum amount of recyclable content, without significantly affecting the intended use of the product or service. It is recognized that cost analysis is required in order to ensure that the products are competitively priced.

23.7. CONTRACT EXECUTION

Successful bidder(s)/proponent(s) who are required to execute a contract agreement with the Village shall provide the following items for performance of a contract:

- a) Contract security;
- b) Proof of insurance;
- c) Certificate of Workplace Safety and Insurance Board (WSIB) compliance;
- d) Policy and Procedures related to Health & Safety;
- e) Signed Third Party Declaration of and supporting documentation that the supplier received AODA training;
- f) Project schedule;
- g) Accrediting credentials; and
- h) Any other relevant documentation as may be warranted and requested at the discretion of Council, the CAO or the Department Head.

The Department Head shall select the appropriate means to guarantee execution and performance of the contract. Means may include one or more of, but are not limited to, financial bonds or other forms of security deposits, provisions for liquidated damages, progress payments, and holdbacks.

23.8. EXERCISE OF CONTRACT RENEWAL OPTIONS

- i. Where a contract contains an option for renewal, the CAO may authorize the Department Head to exercise such option provided that:
 - a) The supplier's performance in supplying the goods, services or construction is considered to have met the requirements of the contract;
 - b) The exercise of this option is in the best interest of the Village; and

- c) Funds are available in appropriate accounts within Council approved budget including authorized revisions to meet the proposed expenditure.
- ii. Where it is recommended that a contract be renewed, it will be authorized by:
 - a) the Head of Council and CAO after being approved by Council For contracts over \$50,000; and
 - b) the Department Head and/or CAO for contracts under \$50,000.

23.9. **CONTRACT AMENDMENTS AND REVISIONS**

- i. No amendment or revision to a contract shall be made unless the amendment is in the best interest of the Village.
- ii. No amendment that changes the overall cost to the Village or value of the contract shall be agreed to without a corresponding change in requirement or scope of work.
- iii. Amendments to contracts are subject to the identification and availability of sufficient funds in appropriate accounts within Council's approved Budget including authorized revisions, approved by resolution of Council.

24. **LEASE CONTRACTS**

In general, rental or leasing arrangements will be considered when the one-time cost of purchase of the goods or service cannot be reasonably justified and the goods or services are legitimately required to meet an operational need.

- 24.1. Lease/rental contracts will be negotiated by the Department Head, in consultation with the CAO and Treasurer.
- 24.2. The lease/rental contract will require the written approval of the CAO and Treasurer.
- 24.3. All financing leases must comply with the *Municipal Act 2001, S.O. 2001, c.25*, as amended.
- 24.4. A report to Council will be required, unless the lease value is less than \$50,000. The report shall include a description of the product or service, the value of the product or service, term of lease, monthly and annual lease payments, residual amount, interest costs and a comparison of lease/purchase options and shall include a recommendation by the Department Head, Treasurer and CAO.

24.5. Any analysis of lease/rental or buy options, whether prepared at the time of proposed procurement or during any review of operational needs or long term planning exercise, must be submitted to the Treasurer and CAO for review and recommendation prior to going forward to Council or any committee of Council.

24.6. A copy of all rental and lease documents must be forwarded to the Treasurer after finalization and the original documents must be sent to the Clerk.

25. TERM OF COUNCIL

Where a contract may extend beyond the term of the Council, the contract may contain provisions to minimize the financial liability of the Village should the subsequent Council not approve sufficient funds to complete the contract and the contract must be terminated by the Village.

26. ACCESS TO INFORMATION

26.1. The disclosure of information received relevant to the issue of bid solicitations or the award of contracts shall be made by the appropriate officers in accordance with the provisions of MFIPPA.

26.2. All suppliers who contract with the Village shall adhere to or exceed the standards set in the MFIPPA and other relevant Ontario or federal privacy legislation or common law as may be passed or amended from time to time, as if they are agents of the Village as related to the confidential and secure treatment, including collection, use, disclosure or retention of personal information, other confidential information of the Village, and all records thereof which they come into contact with in the course of performing services or providing goods to the Village.

27. PROVIDING ASSISTANCE

The CAO has the authority, provided there is no adverse impact upon the operations of the Village, to lend, lease, rent or otherwise provide any vehicle, equipment, facility or other goods owned by the Village to any federal, provincial, or municipal body, ministry, agency, board, corporation or other public authority when such action is reasonably justified due to unforeseen conditions and shall report such action to Council forthwith.

28. CONFLICT OF INTEREST

28.1. The submission of all bids must include a declaration by the Bidder that there is no actual, potential, or reasonably perceived conflict of interest in that Bidder submitting a Bid in respect of that Bid Solicitation, or where there

is an actual, potential, or reasonably perceived conflict of interest, the Bidder must provide details of the conflict of interest. Where a Bidder submits details in respect of an actual, potential, or reasonably perceived conflict of interest, the Department Head shall review the details and, in consultation with the Village's legal counsel, determine if the actual, potential, or reasonably perceived conflict of interest serves to disqualify that Bidder from further participation in the Bid Solicitation.

- 28.2. Personal purchases shall not be made for any elected or appointed officials, members of a board or commission, or for Village officers, employees or their families.
- 28.3. Every elected official, appointed officer, past or present employee of the Village or member of an employee's family is expressly prohibited from accepting, directly or indirectly, from any person, company, firm or corporation and to which any Contract is, has or might be awarded, any rebate, gift or money, except:
 - a) Moderate hospitality during normal course of business that would not significantly exceed what the Village, through its Budget would likely provide in return and would not be perceived by others as influencing the making of a business decision.
- 28.4. All elected officials, officers or employees of the Village shall declare any Conflicts of Interest to the Treasurer and CAO and shall have no involvement in a purchasing process where a real or perceived Conflict of Interest has been found or deemed to exist, including but not limited to:
 - a) Requesting the goods and/or services, setting the parameters of the Purchase, evaluating Bids or recommending, deciding, approving or making Awards; and
 - b) Direct contact with those making those purchasing decisions.
- 28.5. Any employee who has a conflict of interest, meaning a situation where the employee's personal interests may affect or may reasonably be perceived to affect the employee's judgement in acting in the best interest of the Village, shall disclose the conflict of interest to the Chief Administrative Officer (CAO) and shall withdraw from the procurement process. Members of Council, committees and local boards shall comply with the Municipal Conflict of Interest Act.

29. DISPOSAL OF SURPLUS AND OBSOLETE GOODS

29.1. AUTHORITY FOR DISPOSAL OF SURPLUS GOODS

The disposal of surplus and obsolete goods shall be evaluated on a case-by-case basis. Surplus and obsolete goods includes, but is not limited to, equipment, furniture, and vehicles. The Department Head, in conjunction

with the Treasurer and CAO, have the authority to sell, exchange, or otherwise dispose of goods declared as surplus to the needs of the Village, where it is cost effective and in the best interest of the Village to do so.

29.2. MEANS OF DISPOSAL OF SURPLUS GOODS:

Surplus and obsolete goods may:

- a) Be offered to other departments or Public Bodies;
- b) Be sold by external advertisement, formal request, auction or public sale (where it is deemed appropriate, a reserve price may be established);
- c) Be sold or traded to the original Supplier or others in that line of business where it is determined that a higher net return will be obtained than by following other procedures;
- d) Be donated to a registered charity;
- e) Be recycled; or
- f) Be scrapped, in the event that all efforts to dispose of goods are unsuccessful.

The sale or offer of such goods to employees, Municipal Councillors, or their family members, is prohibited.

30. MISCELLANEOUS TERMS/PROVISIONS

30.1 ELECTED OFFICIAL ROLE

Elected officials shall be involved in the procurement process only as voting members of Council. Elected officials shall not make purchasing commitments or acquire goods and services on behalf of the Village and shall not interfere with or attempt to influence staffs' adherence to this Policy.

30.2 NO EMPLOYER - EMPLOYEE RELATIONSHIP

The CAO and/or Department Head shall reject any purchase requisition or proposal for services where the services could result in the establishment of an employer-employee relationship.

30.3 CONSULTANTS' CONFLICTS OF INTEREST - DISCLOSURE

All consultants (engineers, architects, legal and other advisors) retained by the Village shall disclose any real or potential conflict of interest prior to accepting a contract or as soon as the conflict is evident to the consultant. The Village may then withhold the assignment from the consultant until the matter is resolved or may terminate the contract without penalty, at the

Village's sole discretion.

30.4 NO SPLITTING

Splitting of orders (dividing of large orders into two or more smaller requisitions) to stay within expenditures thresholds is not permitted.

30.5 UNSOLICITED PROPOSALS

Unsolicited proposals will not be accepted by the Village. Unsolicited proposals should not be considered where they would circumvent any planned procurement process, including but not limited to any potential RFEOI process.

30.6 GIFTS

No employee shall accept any gifts or favors from any vendor, contractor or others who may do business with the Village that could tend to influence the employee in the performance of his/her duties. "Gifts" do not include promotional materials with a value of less than \$20.00.

30.7 NO DISCRIMINATION

In accordance with best practices, the Village shall attempt to achieve the best value in the procurement of goods and services. Therefore, no preference will be given for the purchase of goods and/or services based on local content, nor will the Village practice local or geographic preference in awarding contracts.

30.8 COMPLIANCE

A Department Head shall not award a contract where this Policy has not been complied with or when the Department Head has been advised not to do so by the Treasurer or CAO.

30.9 DISCIPLINARY ACTION

Any employee who knowingly acts in contravention of this Policy, as amended from time to time, shall be subject to disciplinary action in accordance with the Human Resources Policies of the Village.

30.10 ACCOUNTABILITY

Accountability refers to the obligation to justify decisions made in terms of prudent spending of public funds, and provides clear delegation of authority and a means of ensuring implementation of plans authorized in the annual budget.

SCHEDULE “A” - Purchasing Exemptions

The purchasing methods described in this Policy do not apply to the following goods and services:

1. Petty Cash items
2. Training and Education
 - a) registration and tuition fees for conferences, conventions, courses and seminars
 - b) magazines, books and periodical unless the purchase of such items are subject to value-added services
 - c) memberships
3. Refundable employee/Councillor expenses
 - a) meal allowances
 - b) travel and entertainment
 - c) miscellaneous – non travel
4. Employer’s general expenses
 - a) payroll deductions remittances
 - b) medical
 - c) licenses, (vehicles, etc.)
 - d) debenture payments
 - e) grants
 - f) tax remittances
 - g) damage claims
 - h) payments for employment
 - i) charges to/from other Government or Crown corporations
5. Professional Services
 - a) Committee fees
 - b) Medical and laboratory services
 - c) Fees for professional services, including but not limited to, Human Resources, Legal, Engineering and Planning
 - d) Funeral and Burial expenses
 - e) Appraiser fees
 - f) Witness fees
 - g) Honorariums
 - h) Advertising
 - i) Legal settlements
 - j) Insurance
6. Ongoing maintenance and software licensing agreements for equipment such as computer hardware and software, telecommunications equipment, elevators, and HVAC equipment.
7. Banking Services and Charges
8. Utilities (monthly charges)
 - a) Water and Sewer

- b) Electricity
- c) Gas
- d) Postage
- e) Communication infrastructure services (Bell, Cogeco, etc.)
- f) Utility relocations
- g) Construction work completed by Railways on property of the Village and billed to the Village.

SCHEDULE "B" - Chart of Bid Irregularities

Irregularity	Response
Late Bids	Automatic rejection
Unsealed Envelope	Two (2) working days to correct to the satisfaction of department, otherwise automatic rejection
No bid deposit, uncertified cheque, or financial security not an original	Two (2) working days to correct to the satisfaction of department, otherwise automatic rejection
Amount of Financial Security is insufficient	Two (2) working days to correct to the satisfaction of department, otherwise automatic rejection
Name, or signature of supplier, or bonding company is missing or incomplete	Two (2) working days to correct to the satisfaction of department, otherwise automatic rejection
Failure to provide a letter of agreement to bond (if applicable)	Two (2) working days to correct to the satisfaction of department, otherwise automatic rejection
Bids completed in erasable medium	Two (2) working days to correct to the satisfaction of department, otherwise automatic rejection
Signature of representative authorized to bind the supplier missing or incomplete on the document	Two (2) working days to correct to the satisfaction of department, otherwise automatic rejection
Form of Proposal or Quotation missing or incomplete	Two (2) working days to correct to the satisfaction of department, otherwise automatic rejection
Signature of witness, if required, missing or incomplete	Two (2) working days to correct otherwise automatic rejection
Date of Bid missing or incomplete	Two (2) working days to correct, otherwise automatic rejection (or automatic rejection if stated in the Bid Solicitation)

Irregularity	Response
Bids received on documents other than those provided or specified by the Village	Two (2) working days to correct to the satisfaction of department, otherwise automatic rejection
Bids containing minor obvious clerical errors or mathematical errors	Two (2) working days to initial the correction as made by the Village. Unless otherwise stated in the Bid, the unit price shall prevail and the total Bid price shall be adjusted accordingly. The Village reserves the right to waive initialing and accept Bid as corrected.
Incomplete, illegible or obscure Bids or Bids which contain information not called for, erasures, overwriting or strike outs (not initialed)	Two (2) working days to correct to the satisfaction of the Village, otherwise automatic rejection.
Bids, in which all necessary Addenda have not been acknowledged	Two (2) working days to confirm Bid to the satisfaction of the Village, or if stated in the Bid Solicitation automatic rejection.
Failure to attend mandatory site visit (if required)	Automatic rejection.

Working days start from the hour the Bidder is notified by Village staff of the irregularity.

SCHEDULE "C" – Purchasing and Execution Authority

Method of Purchasing	Dollar Value	Purchasing Authority	Document Execution Authority	Type of Agreement with Supplier
Direct Purchases – (non-competitive) Purchases of \$0 to \$2500	0- \$2500	Any employee authorized by the CAO or Department Head	CAO, Department Head or Designate	Direct acquisition
Low Value Purchases (3 verbal quotations for goods and services)	\$2501 to \$5000	CAO, Department Head or Designate	CAO, Department Head or Designate	Direct acquisition
Mid-range Purchases (obtaining a minimum 3 written quotations for goods and services)	\$5001 to \$15,000	CAO, Department Head or Designate	CAO, Department Head or Designate	Direct acquisition
High Value Purchases (formal bid solicitation to obtain quotations)	\$15,001 to \$50,000	CAO, Department Head or Designate	Department Head and/or CAO	Direct acquisition or Agreement
High Value Tenders or RFP's	\$50,001 and over	CAO, Department Head or Designate	Head of Council and CAO	Direct acquisition or Agreement
Special Circumstances	N/A	Department Head and/or CAO	Department Head and/or CAO	Direct acquisition or Agreement

SCHEDULE "D" - RFP Completion and Submission Requirements

- a) The entire work is to be awarded to one (1) Contractor and therefore ALL ITEMS must be bid on the RFP Form.
- b) When so required by the Village, the Contractor shall produce evidence as to his qualifications and previous experience in the types of work contemplated by this Contract.
- c) All unit prices must be clearly indicated. The person signing on behalf of the Contractor must initial erasures, overwriting, or strike-outs.
- d) In the event of a discrepancy between the unit price submitted and the extension utilized in the calculation of the total for any item, then the unit price shall govern.
- e) The total bid must not be restricted by a statement added to the RFP Form or a covering letter, or alterations to the RFP Form provided by the Village. Adjustments by fax, telegram or letter to an RFP already submitted will not be considered. A bidder desiring to make adjustments to an RFP must withdraw the RFP and/or supersede it with a later submission prior to the closing time of the RFP call.
- f) For an interpretation of the tendering requirements, the Village of Merrickville-Wolford Procurement Policy shall govern.
- g) The RFP Envelope must be clearly marked as to the fact it is an RFP.
- h) Each amount in the RFP shall be a reasonable price for each item. The CAO, Treasurer or Department Head or Designate, as defined herein, shall be the sole judge of such matters and should any RFP be considered to be unbalanced or unclear it may be rejected, or additional clarification may be requested prior to acceptance or rejection.

RFP Deposit

- a) A certified cheque or bid bond made payable to the Village in the amount of 5% of the total tender must be submitted with the RFP if requested. The cheques of the two lowest bidders will be retained until acceptance of the tender by the Village and execution of a contract. The cheques of all other bidders will be returned within 7 days of tender opening.
- b) The Village shall not pay interest on RFP deposits.

Bonding Requirements

- a) The successful Bidder will file with the Village a 50% performance bond, and a 50% labour and materials bond signed and sealed by a recognized bonding company, in the amount of 100% of the total RFP value, upon request.
- b) Upon receipt of such bonds, the RFP deposit will be returned to the contractor.

- c) The surety of the successful Bidder and the bonds referred to shall be to the satisfaction of the Treasurer.

Collusion

The Bidder shall not engage in collusion of any sort and, in particular, shall:

- (a) ensure that no person or other legal entity, other than the Bidder has any undisclosed interest in the RFP;
- (b) prepare its RFP without any knowledge of, comparison of figures with, or arrangement with, any other person or firm preparing an RFP for the same work.

Right to Accept or Reject Tenders

Notwithstanding any other provision in this Contract, The Village of Merrickville-Wolford reserves the right in its sole, absolute and unfettered discretion to:

- a) make public the names of any or all bidders and their quoted price;
- b) request written clarification or the submission of supplementary written information in relation to the clarification request from any bidder and incorporate such response to that request for clarification into the bid;
- c) consider during the evaluation of the RFP and/or adjust a bidder's scoring and/or reject a Bid on the basis of:
 - i) a financial analysis;
 - ii) information provided by references;
 - iii) the bidder's past performance on previous contracts awarded by the Village of Merrickville-Wolford;
 - iv) the information provided by a Bidder pursuant to the Village of Merrickville-Wolford exercising its clarification rights under this RFP process;or
 - v) Any other information deemed relevant by the Village of Merrickville-Wolford that arises during the Bid process;
- d) verify with any Bidder or with a third party any information set out in an RFP;
- e) check references other than those provided by any bidder;
- f) disqualify any bidder whose RFP contains misrepresentations or any other inaccurate or misleading information, or any qualifications;

- g) disqualify any bidder or the RFP of any bidder who has engaged in conduct prohibited by this RFP process;
- h) make changes, including substantial changes, to this call for RFP provided that those changes are issued by way of addenda in the manner set out in this Bid;
- i) select the bidder other than the bidder whose bid reflects the lowest cost to the Village of Merrickville-Wolford or the highest overall score;
- j) cancel this RFP process at any stage;
- k) cancel this RFP process at any stage and issue a new RFP call or RFP for the same or similar deliverables;
- l) accept or reject any or all RFPs in whole or in part;
- m) accept any irregular or non-compliant bid;
- n) discuss with any bidder different or additional terms to those contemplated in this RFP call; or
- o) if a single bid is received, reject the bid of the sole bidder and cancel this RFP call or enter into direct negotiations with the sole bidder.

These reserved rights are in addition to any other expressed rights or any other rights which may be implied in the circumstances. The bidders acknowledge that the Village of Merrickville-Wolford may rely upon the criteria it deems relevant, even though such criteria may not have been disclosed to the bidders. By submitting an RFP, the bidder acknowledges the Village of Merrickville-Wolford's rights under this Section and absolutely waives any right or cause of action against the Village of Merrickville-Wolford or its agents arising in any way from or relating to this RFP process, whether such right arises at law, equity, in contract, negligence or otherwise.

Acceptance of the RFP shall occur at the time the Village awards the RFP and not necessarily at the time the award is communicated to the successful Bidder.

Village of Merrickville-Wolford
Water and Wastewater Facilities
Operation and Maintenance Services



SCHEDULE D: MUNICIPAL DRINKING WATER LICENCE



MUNICIPAL DRINKING WATER LICENCE

Licence Number: 264-101

Issue Number: 4

Pursuant to the *Safe Drinking Water Act*, 2002, S.O. 2002, c. 32, and the regulations made thereunder and subject to the limitations thereof, I hereby issue this municipal drinking water licence under Part V of the *Safe Drinking Water Act*, 2002, S.O. 2002, c. 32 to:

The Corporation of the Village of Merrickville-Wolford
317 Brock St. W.
Merrickville, ON
K0G 1N0

For the following municipal residential drinking water system:

Merrickville Drinking Water System

This municipal drinking water licence includes the following:

Schedule	Description
Schedule A	Drinking Water System Information
Schedule B	General Conditions
Schedule C	System-Specific Conditions
Schedule D	Conditions for Relief from Regulatory Requirements
Schedule E	Pathogen Log Removal/Inactivation Credits

Upon the effective date of this drinking water licence # 264-101, all previously issued versions of licence # 264-101 are revoked and replaced by this licence.

DATED at TORONTO this 19th day of November, 2022

Signature

Aziz Ahmed, P.Eng.
Director
Part V, *Safe Drinking Water Act*, 2002

Schedule A: Drinking Water System Information

System Owner	The Corporation of the Village of Merrickville-Wolford
Licence Number	264-101
Drinking Water System Name	Merrickville Drinking Water System
Licence Effective Date	November 19, 2021

1.0 Licence Information

Licence Issue Date	November 19, 2021
Licence Effective Date	November 19, 2021
Licence Expiry Date	November 19, 2026
Application for Licence Renewal Date	May 19, 2026

2.0 Incorporated Documents

The following documents are applicable to the above drinking water system and form part of this licence:

2.1 Drinking Water Works Permit

Drinking Water System Name	Permit Number	Issue Date
Merrickville Drinking Water System	264-201	November 19, 2021

2.2 Permits to Take Water

Water Taking Location	Permit Number	Issue Date
105 Main St E Merrickville-Wolford, United Counties of Leeds and Grenville	2110-AP9LSG	July 17, 2020

2.3 Other Documents

Document Title	Version Number	Version Date

3.0 Financial Plans

The Financial Plan Number for the Financial Plan required to be developed for this drinking water system in accordance with O. Reg. 453/07 shall be:	264-301
Alternately, if one Financial Plan is developed for all drinking water systems owned by the owner, the Financial Plan Number shall be:	264-301A

4.0 Accredited Operating Authority

Drinking Water System or Operational Subsystems	Accredited Operating Authority	Operational Plan No.	Operating Authority No.
Merrickville Drinking Water System	Ontario Clean Water Association	264-401	264-OA1

Schedule B: General Conditions

System Owner	The Corporation of the Village of Merrickville-Wolford
Licence Number	264-101
Drinking Water System Name	Merrickville Drinking Water System
Licence Effective Date	November 19, 2021

1.0 Definitions

1.1 Words and phrases not defined in this licence and the associated drinking water works permit shall be given the same meaning as those set out in the SDWA and any regulations made in accordance with that act, unless the context requires otherwise.

1.2 In this licence and the associated drinking water works permit:

“**adverse effect**”, “**contaminant**” and “**natural environment**” shall have the same meanings as in the EPA;

“**alteration**” may include the following in respect of this drinking water system:

- (a) An addition to the system,
- (b) A modification of the system,
- (c) A replacement of part of the system, and
- (d) An extension of the system;

“**compound of concern**” means a contaminant described in paragraph 4 subsection 26 (1) of O. Reg. 419/05, namely, a contaminant that is discharged to the air from a component of the drinking water system in an amount that is not negligible;

“**CT**” means the CT Disinfection Concept, as described in subsection 3.1.1 of the Ministry’s Procedure for Disinfection of Drinking Water in Ontario, dated July 29 2016.

“**Director**” means a Director appointed pursuant to section 6 of the SDWA for the purposes of Part V of the SDWA;

“**drinking water works permit**” means the drinking water works permit for the drinking water system, as identified in Schedule A of this licence and as amended from time to time;

“**emission summary table**” means a table described in paragraph 14 of subsection 26 (1) of O. Reg. 419/05;

“**EPA**” means the *Environmental Protection Act*, R.S.O. 1990, c. E.19;

“**financial plan**” means the financial plan required by O. Reg. 453/07;

“Harmful Algal Bloom (HAB)” means an overgrowth of aquatic algal bacteria that produce or have the potential to produce toxins in the surrounding water, when the algal cells are damaged or die. Such bacteria are harmful to people and animals and include microcystins produced by cyanobacterial blooms.

“licence” means this municipal drinking water licence for the municipal drinking water system identified in Schedule A of this licence;

“Ministry” means the Ontario Ministry of the Environment, Conservation and Parks;

“operational plan” means an operational plan developed in accordance with the Director’s Directions – Minimum Requirements for Operational Plans made under the authority of subsection 15(1) of the SDWA;

“owner” means the owner of the drinking water system as identified in Schedule A of this licence;

“OWRA” means the *Ontario Water Resources Act*, R.S.O. 1990, c. 0.40;

“permit to take water” means the permit to take water that is associated with the taking of water for purposes of the operation of the drinking water system, as identified in Schedule A of this licence and as amended from time to time;

“point of impingement” has the same meaning as in section 2 of O. Reg. 419/05 under the EPA;

“point of impingement limit” means the appropriate standard from Schedule 2 or 3 of O. Reg. 419/05 under the EPA and if a standard is not provided for a compound of concern, the concentration set out for the compound of concern in the document titled “Air Contaminants Benchmarks (ACB) List: Standards, guidelines and screening levels for assessing point of impingement concentrations of air contaminants”, as amended from time to time and published by the Ministry and available on a government of Ontario website;

“licensed engineering practitioner” means a person who holds a licence, limited licence or temporary licence under the Professional Engineers Act;

“provincial officer” means a provincial officer designated pursuant to section 8 of the SDWA;

“publication NPC-300” means the Ministry publication titled “Environmental Noise Guideline: Stationary and Transportation Sources – Approval and Planning” dated August 2013, as amended;

“SCADA system” means a supervisory control and data acquisition system used for process monitoring, automation, recording and/or reporting within the drinking water system;

“SDWA” means the *Safe Drinking Water Act*, 2002, S.O. 2002, c. 32;

“**sensitive receptor**” means any location where routine or normal activities occurring at reasonably expected times would experience adverse effect(s) from a discharge to air from an emergency generator that is a component of the drinking water system, including one or a combination of:

- (a) private residences or public facilities where people sleep (e.g.: single and multi-unit dwellings, nursing homes, hospitals, trailer parks, camping grounds, etc.),
- (b) institutional facilities (e.g.: schools, churches, community centres, day care centres, recreational centres, etc.),
- (c) outdoor public recreational areas (e.g.: trailer parks, play grounds, picnic areas, etc.), and
- (d) other outdoor public areas where there are continuous human activities (e.g.: commercial plazas and office buildings).

“**sub-system**” has the same meaning as in Ontario Regulation 128/04 (Certification of Drinking Water System Operators and Water Quality Analysts) under the SDWA;

“**surface water**” means water bodies (lakes, wetlands, ponds - including dug-outs), water courses (rivers, streams, water-filled drainage ditches), infiltration trenches, and areas of seasonal wetlands;

“**UV**” means ultraviolet, as in ultraviolet light produced from an ultraviolet reactor.

2.0 Applicability

- 2.1 In addition to any other applicable legal requirements, the drinking water system identified above shall be established, altered and operated in accordance with the conditions of the drinking water works permit and this licence.

3.0 Licence Expiry

- 3.1 This licence expires on the date identified as the licence expiry date in Schedule A of this licence.

4.0 Licence Renewal

- 4.1 Any application to renew this licence shall be made on or before the date identified as the application for licence renewal date set out in Schedule A of this licence.

5.0 Compliance

- 5.1 The owner and operating authority shall ensure that any person authorized to carry out work on or to operate any aspect of the drinking water system has been informed of the SDWA, all applicable regulations made in accordance with that act, the drinking water works permit and this licence and shall take all reasonable measures to ensure any such person complies with the same.

6.0 Licence and Drinking Water Works Permit Availability

- 6.1 At least one copy of this licence and the drinking water works permit shall be stored in such a manner that they are readily viewable by all persons involved in the operation of the drinking water system.

7.0 Permit to Take Water and Drinking Water Works Permit

- 7.1 A permit to take water identified in Schedule A of this licence is the applicable permit on the date identified as the Effective Date of this licence.
- 7.2 A drinking water works permit identified in Schedule A of this licence is the applicable permit on the date identified as the Effective Date of this licence.

8.0 Financial Plan

- 8.1 For every financial plan prepared in accordance with subsections 2(1) and 3(1) of O. Reg. 453/07, the owner of the drinking water system shall:
- 8.1.1 Ensure that the financial plan contains on the front page of the financial plan, the appropriate financial plan number as set out in Schedule A of this licence; and
- 8.1.2 Submit a copy of the financial plan to the Ministry of Municipal Affairs and Housing within three (3) months of receiving approval by a resolution of municipal council or the governing body of the owner.

9.0 Interpretation

- 9.1 Where there is a conflict between the provisions of this licence and any other document, the following hierarchy shall be used to determine the provision that takes precedence:
- 9.1.1 The SDWA;
- 9.1.2 A condition imposed in this licence that explicitly overrides a prescribed regulatory requirement;
- 9.1.3 A condition imposed in the drinking water works permit that explicitly overrides a prescribed regulatory requirement;
- 9.1.4 Any regulation made under the SDWA;
- 9.1.5 Any provision of this licence that does not explicitly override a prescribed regulatory requirement;
- 9.1.6 Any provision of the drinking water works permit that does not explicitly override a prescribed regulatory requirement;
- 9.1.7 Any application documents listed in this licence, or the drinking water works permit from the most recent to the earliest; and

- 9.1.8 All other documents listed in this licence, or the drinking water works permit from the most recent to the earliest.
- 9.1.9 Any other technical bulletin or procedure issued by the Ministry from the most recent to the earliest.
- 9.2** If any requirement of this licence or the drinking water works permit is found to be invalid by a court of competent jurisdiction, the remaining requirements of this licence and the drinking water works permit shall continue to apply.
- 9.3** The issuance of and compliance with the conditions of this licence and the drinking water works permit does not:
- 9.3.1 Relieve any person of any obligation to comply with any provision of any applicable statute, regulation or other legal requirement, including the *Environmental Assessment Act*, R.S.O. 1990, c. E.18; and
- 9.3.2 Limit in any way the authority of the appointed Directors and provincial officers of the Ministry to require certain steps be taken or to require the owner to furnish any further information related to compliance with the conditions of this licence or the drinking water works permit.
- 9.4** For greater certainty, nothing in this licence or the drinking water works permit shall be read to provide relief from regulatory requirements in accordance with section 46 of the SDWA, except as expressly provided in the licence or the drinking water works permit.

10.0 Adverse Effects

- 10.1** Nothing in this licence or the drinking water works permit shall be read as to permit:
- 10.1.1 The discharge of a contaminant into the natural environment that causes or is likely to cause an adverse effect; or
- 10.1.2 The discharge of any material of any kind into or in any waters or on any shore or bank thereof or into or in any place that may impair the quality of the water of any waters.
- 10.2** All reasonable steps shall be taken to minimize and ameliorate any adverse effect on the natural environment or impairment of the quality of water of any waters resulting from the operation of the drinking water system including such accelerated or additional monitoring as may be necessary to determine the nature and extent of the effect or impairment.
- 10.3** Fulfillment of one or more conditions imposed by this licence or the drinking water works permit does not eliminate the requirement to fulfill any other condition of this licence or the drinking water works permit.

11.0 Change of Owner or Operating Authority

- 11.1 This licence is not transferable without the prior written consent of the Director.
- 11.2 The owner shall notify the Director in writing at least 30 days prior to a change of any operating authority identified in Schedule A of this licence.
- 11.2.1 Where the change of operating authority is the result of an emergency situation, the owner shall notify the Director in writing of the change as soon as practicable.

12.0 Information to be Provided

- 12.1 Any information requested by a Director or a provincial officer concerning the drinking water system and its operation, including but not limited to any records required to be kept by this licence or the drinking water works permit, shall be provided upon request.

13.0 Records Retention

- 13.1 Except as otherwise required in this licence or the drinking water works permit, any records required by or created in accordance with this licence or the drinking water works permit, other than the records specifically referenced in section 12 or section 13 of O. Reg. 170/03, shall be retained for at least 5 years and made available for inspection by a provincial officer, upon request.

14.0 Chemicals and Materials

- 14.1 All chemicals and materials used in the alteration or operation of the drinking water system that come into contact with water within the system shall meet all applicable standards set by both the American Water Works Association ("AWWA") and the American National Standards Institute ("ANSI") safety criteria standards NSF/60, NSF/61 and NSF/372.
- 14.1.1 In the event that the standards are updated, the owner may request authorization from the Director to use any on hand chemicals and materials that previously met the applicable standards.
- 14.2 The most current chemical and material product registration documentation from a testing institution accredited by either the Standards Council of Canada or by the American National Standards Institution ("ANSI") shall be available at all times for each chemical and material used in the operation of the drinking water system that comes into contact with water within the system.
- 14.3 Conditions 14.1 and 14.2 do not apply in the case of the following:
- 14.3.1 Water pipe and pipe fittings meeting AWWA specifications made from ductile iron, cast iron, PVC, fibre and/or steel wire reinforced cement pipe or high density polyethylene (HDPE);
- 14.3.2 Articles made from stainless steel, glass, HDPE or Teflon®;

- 14.3.3 Cement mortar for watermain lining and for water contacting surfaces of concrete structures made from washed aggregates and Portland cement;
- 14.3.4 Gaskets that are made from NSF approved materials;
- 14.3.5 Food grade oils and lubricants, food grade anti-freeze, and other food grade chemicals and materials that are compatible for drinking water use that may come into contact with drinking water, but are not added directly to the drinking water; or
- 14.3.6 Any particular chemical or material where the owner has written documentation signed by the Director that indicates that the Ministry is satisfied that the chemical or material is acceptable for use within the drinking water system and the chemical or material is only used as permitted by the documentation.

15.0 Drawings

- 15.1 All drawings and diagrams in the possession of the owner that show any treatment subsystem as constructed shall be retained by the owner unless the drawings and diagrams are replaced by a revised or updated version showing the subsystem as constructed subsequent to the alteration.
- 15.2 Any alteration to any treatment subsystem shall be incorporated into process flow diagrams, process and instrumentation diagrams, and record drawings and diagrams within one year of the alteration being completed or placed into service.
- 15.3 Process flow diagrams and process and instrumentation diagrams for any treatment subsystem shall be kept in a place, or made available in such a manner, that they may be readily viewed by all persons responsible for all or part of the operation of the drinking water system.

16.0 Operations and Maintenance Manual

- 16.1 An up-to-date operations and maintenance manual or manuals shall be maintained and applicable parts of the manual or manuals shall be made available for reference to all persons responsible for all or part of the operation or maintenance of the drinking water system.
- 16.2 The operations and maintenance manual or manuals, shall include at a minimum:
 - 16.2.1 The requirements of this licence and associated procedures;
 - 16.2.2 The requirements of the drinking water works permit for the drinking water system;
 - 16.2.3 A description of the processes used to achieve primary and secondary disinfection within the drinking water system including where applicable:
 - a) A copy of the CT calculations that were used as the basis for primary disinfection under worst case operating conditions and other operating conditions, if applicable; and

- b) The validated operating conditions for UV disinfection equipment, including a copy of the validation certificate;
- 16.2.4 Procedures for monitoring and recording the in-process parameters necessary for the control of any treatment subsystem and for assessing the performance of the drinking water system;
 - 16.2.5 Procedures for the operation and maintenance of monitoring equipment;
 - 16.2.6 Contingency plans and procedures for the provision of adequate equipment and material to deal with emergencies, upset conditions and equipment breakdown;
 - 16.2.7 Procedures for dealing with complaints related to the drinking water system, including the recording of the nature of the complaint and any investigation and corrective action taken in respect of the complaint;
 - 16.2.8 An inspection schedule for all wells associated with the drinking water system, including all production wells, standby wells, test wells and monitoring wells;
 - 16.2.9 Well inspection and maintenance procedures that consider the entire well structure of each well including all above and below grade well components; and
 - 16.2.10 Remedial action plans for situations where an inspection indicates non-compliance with respect to regulatory requirements and/or risk to raw well water quality.
- 16.3** Procedures necessary for the operation and maintenance of any alterations to the drinking water system shall be incorporated into the operations and maintenance manual or manuals prior to those alterations coming into operation.
- 16.4** All of the procedures included or referenced within the operations and maintenance manual must be implemented.

Schedule C: System-Specific Conditions

System Owner	The Corporation of the Village of Merrickville-Wolford
Licence Number	264-101
Drinking Water System Name	Merrickville Drinking Water System
Licence Effective Date	November 19, 2021

1.0 System Performance

Rated Capacity

- 1.1 For each treatment subsystem listed in column 1 of Table 1, the maximum daily volume of treated water that flows from the treatment subsystem to the distribution system shall not exceed the value identified as the rated capacity in column 2 of the same row.

Table 1: Rated Capacity	
Column 1 Treatment Subsystem Name	Column 2 Rated Capacity (m ³ /day)
Merrickville Drinking Water System	1880

Maximum Flow Rates

- 1.2 For each treatment subsystem listed in column 1 of Table 2, the maximum flow rate of water that flows into a treatment subsystem component listed in column 2 shall not exceed the value listed in column 3 of the same row.

Table 2: Maximum Flow Rates		
Column 1 Treatment Subsystem Name	Column 2 Treatment Subsystem Component	Column 3 Maximum Flow Rate (L/s)
Not Applicable	Not Applicable	Not Applicable

- 1.3 Despite conditions 1.1 and 1.2, a treatment subsystem may be operated temporarily at a maximum daily volume and/or a maximum flow rate above the values set out in column 2 of Table 1 and column 3 of Table 2 respectively for the purposes of fighting a large fire or for the maintenance of the drinking water system.
- 1.4 Condition 1.3 does not authorize the discharge into the distribution system of any water that does not meet all of the requirements of this licence and all other regulatory requirements, including compliance with the Ontario Drinking Water Quality Standards.

Residuals Management

- 1.5** In respect of an effluent discharged into the natural environment from a treatment subsystem or treatment subsystem component listed in column 1 of Table 3:
- 1.5.1 The annual average concentration of a test parameter identified in column 2 shall not exceed the value in column 3 of the same row; and
- 1.5.2 The maximum concentration of a test parameter identified in column 2 shall not exceed the value in column 4 of the same row.
- 1.5.3 The test parameters listed in column 2 of Table 3 shall be sampled in accordance with conditions 5.2, 5.3 and 5.4 of this Licence.

Table 3: Residuals Management			
Column 1 Treatment Subsystem or Treatment Subsystem Component Name	Column 2 Test Parameter	Column 3 Annual Average Concentration (mg/L)	Column 4 Maximum Concentration (mg/L)
Not Applicable	Not Applicable	Not Applicable	Not Applicable

UV Disinfection Equipment Performance

- 1.6** For each treatment subsystem or treatment subsystem component listed in column 1 of Table 4, and while directing water to the distribution system and being used to meet pathogen log removal/inactivation credits specified in Schedule E:
- 1.6.1 The UV disinfection equipment shall be operated within the validated limits for the equipment at all times such that a continuous pass-through UV dose is maintained throughout the life time of the UV lamp(s) that is at least the minimum continuous pass-through UV dose set out in column 2 of the same row
- 1.6.2 In addition to any other sampling, analysis and recording that may be required, the ultraviolet light disinfection equipment shall test for the test parameters set out in column 4 of the same row at a testing frequency of once every five (5) minutes or less and record the test data at a recording frequency of once every four (4) hours or less;
- 1.6.3 If there is a UV disinfection equipment alarm signaling that the disinfection equipment is malfunctioning, has lost power, or is not providing the appropriate level of disinfection the test parameters set out in column 4 of the same row shall be recorded at a recording frequency of once every five minutes or less until the alarm condition has been corrected;

- 1.6.4 A monthly summary report shall be prepared at the end of each calendar month which sets out the time, date and duration of each UV equipment alarm described in condition 1.6.3, the volume of water treated during each alarm period and the actions taken by the operating authority to correct the alarm situation;

Table 4: UV Disinfection Equipment			
Column 1 Treatment Subsystem or Treatment Subsystem Component Name	Column 2 Minimum Continuous Pass-Through UV Dose (mJ/cm²)	Column 3 Control Strategy	Column 4 Test Parameter
Not Applicable	Not Applicable	Not Applicable	Not Applicable

2.0 Flow Measurement and Recording Requirements

- 2.1** For each treatment subsystem identified in column 1 of Table 1 and in addition to any other flow measurement and recording that may be required, continuous flow measurement and recording shall be undertaken for:
- 2.1.1 The flow rate (L/s) and daily volume (m³/day) of treated water that flows from the treatment subsystem to the distribution system.
- 2.1.2 The flow rate (L/s) and daily volume (m³/day) of water that flows into the treatment subsystem.
- 2.2** For each treatment subsystem component identified in column 2 of Table 2 and in addition to any other flow measurement and recording that may be required, continuous flow measurement and recording shall be undertaken for the flow rate and daily volume of water that flows into the treatment subsystem component.

- 2.3** Where a rated capacity from Table 1 or a maximum flow rate from Table 2 is exceeded, the following shall be recorded:
- 2.3.1 The difference between the measured amount and the applicable rated capacity or maximum flow rate specified in Table 1 or Table 2;
 - 2.3.2 The time and date of the measurement;
 - 2.3.3 The reason for the exceedance; and
 - 2.3.4 The duration of time that lapses between the applicable rated capacity or maximum flow rate first being exceeded and the next measurement where the applicable rated capacity or maximum flow rate is no longer exceeded.

3.0 Calibration of Flow Measuring Devices

- 3.1** All flow measuring devices that are required by regulation, by a condition in the drinking water works permit #264-201, or by a condition otherwise imposed by the Ministry, shall be checked and where necessary calibrated in accordance with the manufacturer's instructions.
- 3.2** If the manufacturer's instructions do not indicate how often to check and calibrate a flow measuring device, the equipment shall be checked and where necessary calibrated at least once every 12 months during which the drinking water system is in operation.
- 3.2.1 For greater certainty, if condition 3.2 applies, the equipment shall be checked and where necessary calibrated not more than 30 days after the first anniversary of the day the equipment was checked and calibrated in the previous 12-month period.

4.0 Calibration of CT Monitoring System

- 4.1** Any measuring instrumentation that forms part of the monitoring system for CT shall be checked and where necessary calibrated at least once every 12 months during which the drinking water system is in operation, or more frequently in accordance with the manufacturer's instructions.
- 4.1.1 For greater certainty, if condition 4.1 applies, the instrumentation shall be checked and where necessary calibrated not more than 30 days after the first anniversary of the day the equipment was checked and calibrated in the previous 12-month period.

5.0 Additional Sampling, Testing and Monitoring

Drinking Water Health and Non-Health Related Parameters

- 5.1 For each treatment subsystem or treatment subsystem component identified in column 1 of Tables 5 and 6 and in addition to any other sampling, testing and monitoring that may be required, sampling, testing and monitoring shall be undertaken for a test parameter listed in column 2 at the sampling frequency listed in column 3 and at the monitoring location listed in column 4 of the same row.

Table 5: Drinking Water Health Related Parameters			
Column 1 Treatment Subsystem or Treatment Subsystem Component Name	Column 2 Test Parameter	Column 3 Sampling Frequency	Column 4 Monitoring Location
Not Applicable	Not Applicable	Not Applicable	Not Applicable

Table 6: Drinking Water Non-Health Related Parameters			
Column 1 Treatment Subsystem or Treatment Subsystem Component Name	Column 2 Test Parameter	Column 3 Sampling Frequency	Column 4 Monitoring Location
Not Applicable	Not Applicable	Not Applicable	Not Applicable

Environmental Discharge Parameters

- 5.2 For each treatment subsystem or treatment subsystem component identified in column 1 of Table 7 and in addition to any other sampling, testing and monitoring that may be required, sampling, testing and monitoring shall be undertaken for a test parameter listed in column 2 using the sample type identified in column 3 at the sampling frequency listed in column 4 and at the monitoring location listed in column 5 of the same row.
- 5.3 For the purposes of Table 7:
- 5.3.1 Manual Composite means the mean of at least three grab samples taken during a discharge event, with one sample being taken immediately following the commencement of the discharge event, one sample being taken approximately at the mid-point of the discharge event and one sample being taken immediately before the end of the discharge event; and
- 5.3.2 Automated Composite means samples must be taken during a discharge event by an automated sampler at a minimum sampling frequency of once per hour.
- 5.4 Any sampling, testing and monitoring for the test parameter Total Suspended Solids shall be performed in accordance with the requirements set out in the publication "Standard

Methods for the Examination of Water and Wastewater”, 23rd Edition, 2017, or as amended from time to time by more recently published editions.

Table 7: Environmental Discharge Parameters				
Column 1 Treatment Subsystem or Treatment Subsystem Component Name	Column 2 Test Parameter	Column 3 Sample Type	Column 4 Sampling Frequency	Column 5 Monitoring Location
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

5.5 Pursuant to Condition 10 of Schedule B of this licence, the owner may undertake the following environmental discharges associated with the maintenance and/or repair of the drinking water system:

5.5.1 The discharge of potable water from a watermain to a road or storm sewer;

5.5.2 The discharge of potable water from a water storage facility or pumping station:

5.5.2.1 To a road or storm sewer; or

5.5.2.2 To a watercourse where the discharge has been dechlorinated and if necessary, sediment and erosion control measures have been implemented.

5.5.3 The discharge of dechlorinated non-potable water from a watermain, water storage facility or pumping station to a road or storm sewer;

5.5.4 The discharge of raw water from a groundwater well to the environment where if necessary, sediment and erosion control measures have been implemented; and

5.5.5 The discharge of raw water, potable water or non-potable water from a treatment subsystem to the environment where if necessary, the discharge has been dechlorinated and sediment and erosion control measures have been implemented.

5.5.6 The discharge of any excess water to a road, storm sewer or the environment, associated with the management of materials excavated as part of watermain construction or repair, where necessary sediment, erosion and environmental control measures have been implemented.

6.0 Studies Required

Harmful Algal Blooms

6.1 Not applicable.

7.0 Source Protection

- 7.1 The owner of the drinking water system shall implement risk management measures, as appropriate, to manage any potential threat to drinking water that results from the operation of the drinking water system.
- 7.2 The owner of the system shall notify the Director in writing within thirty (30) days of any approved changes to an applicable source protection plan that impact the assessed threat level of a fuel oil system identified in Schedule A of drinking water works permit.
- 7.3 The notification required in condition 7.2 shall include:
- 7.3.1 A description of the changes and their impact on the assessed threat level of the fuel oil system(s); and,
 - 7.3.2 A timeline for re-assessing the threat level and providing the results of the assessment to the Director.

Schedule D: Conditions for Relief from Regulatory Requirements

System Owner	The Corporation of the Village of Merrickville-Wolford
Licence Number	264-101
Drinking Water System Name	Merrickville Drinking Water System
Licence Effective Date	November 19, 2021

As of the effective date of this drinking water licence, no relief from regulatory requirements is authorized by the Director under section 46 of the SDWA in respect of the drinking water system.

Schedule E: Pathogen Log Removal/Inactivation Credits

System Owner	The Corporation of the Village of Merrickville-Wolford
Licence Number	264-101
Drinking Water System Name	Merrickville Drinking Water System
Licence Effective Date	November 19, 2021

1.0 Primary Disinfection Pathogen Log Removal/Inactivation Credits

Village of Merrickville-Wolford Water Treatment Plant

Well No.1, Well No.2 and Well No.4 [GROUNDWATER]

Minimum Log Removal/ Inactivation Required	Cryptosporidium Oocysts	Giardia Cysts	Viruses
Village of Merrickville- Wolford Water Treatment Plant	0	0	2

Log Removal/Inactivation Credits Assigned ^a	Cryptosporidium Oocysts	Giardia Cysts	Viruses
Chlorination [CT: Clearwell]	-	-	2 +

^a Log removal/inactivation credit assignment is based on each treatment process being fully operational and the applicable log removal/inactivation credit assignment criteria being met.

Treatment Component	Log Removal/Inactivation Credit Assignment Criteria
Chlorination	<ol style="list-style-type: none"> 1. Sampling and testing for free chlorine residual shall be carried out by continuous monitoring equipment in the treatment process at or near a location where the intended contact time has just been completed in accordance with the Ministry's Procedure for Disinfection of Drinking Water in Ontario; and 2. At all times, CT provided shall be greater than or equal to the CT required to achieve the log removal credits assigned.
Primary Disinfection Notes	

Village of Merrickville-Wolford
Water and Wastewater Facilities
Operation and Maintenance Services



SCHEDULE E: DRINKING WATER WORKS PERMIT

DRINKING WATER WORKS PERMIT

Permit Number: 264-201
Issue Number: 3

Pursuant to the *Safe Drinking Water Act, 2002*, S.O. 2002, c. 32, and the regulations made thereunder and subject to the limitations thereof, I hereby issue this drinking water works permit under Part V of the *Safe Drinking Water Act, 2002*, S.O. 2002, c. 32 to:

The Corporation of the Village of Merrickville-Wolford
317 Brock St. W.
Merrickville, ON
K0G 1N0

For the following municipal residential drinking water system:

Merrickville Drinking Water System

This drinking water works permit includes the following:

Schedule	Description
Schedule A	Drinking Water System Description
Schedule B	General
Schedule C	All documents issued as Schedule C to this drinking water works permit which authorize alterations to the drinking water system
Schedule D	Process Flow Diagrams

Upon the effective date of this drinking water works permit # 264-201, all previously issued versions of permit # 264-201 are revoked and replaced by this permit.

DATED at TORONTO this 19th day of November, 2021

Signature



Aziz Ahmed, P.Eng.
Director
Part V, *Safe Drinking Water Act, 2002*

Schedule A: Drinking Water System Description

System Owner	The Corporation of the Village of Merrickville-Wolford
Permit Number	264-201
Drinking Water System Name	Merrickville Drinking Water System
Permit Effective Date	November 19, 2021

1.0 System Description

- 1.1 The following is a summary description of the works comprising the above drinking water system:

Overview

The **Merrickville Drinking Water System** consists of three (3) groundwater wells, a treatment plant consisting of chlorination, an on-site water storage reservoir, high lift pumping and approximately 8 kilometers of watermains.

Merrickville Drinking Water System

Well No. 1

Street Address	Located on the north side of Main Street East approximately 60 metres east of St. Lawrence Street
UTM Coordinates	NAD 83: UTM Zone 18: 434028.00 m E, 4973993.00 m N
System Type	Groundwater
Description	250 mm x 35 m deep drilled groundwater well
Well Pump	Submersible well pump rated at 7.9 L/sec at a TDH of 13 m
Notes	Well water discharge line equipped with a flow meter Well water from Well No. 1 is disinfected and discharged to the clearwell located in the main pumphouse.

Well No. 2

Street Address	Located on the north side of Main Street East approximately 60 metres east of St. Lawrence Street.
UTM Coordinates	NAD 83: UTM Zone 18: 434020.00 m E, 4974014.00 m N
System Type	Groundwater
Description	200 mm x 49 m deep drilled groundwater well
Well Pump	Submersible well pump rated at 5.0 L/sec and 76 m TDH
Notes	Well water discharge line equipped with a flow meter Well water from Well No. 2 and Well No. 4 is disinfected and discharged to the clearwell located in the main pumphouse.

Well No. 4

Street Address	Located on the north side of Main Street East approximately 85 metres east of St. Lawrence Street.
UTM Coordinates	NAD 83: UTM Zone 18: 434045.00 m E, 4974011.00 m N
System Type	Groundwater
Description	200 mm x 50 m deep drilled groundwater well
Well Pump	Submersible well pump rated at 9.2 L/sec at a TDH of 15 m
Notes	Well water discharge line equipped with a flow meter Well water from Well No. 2 and Well No. 4 is disinfected and discharged to the clearwell located in the main pumphouse.

Treatment Plant**Main Pumphouse**

Name	Merrickville Well Supply System
Street Address	105 Main Street East, Merrickville, ON
UTM Coordinates	NAD 83: UTM Zone 18: 434020.00 m E, 4974014.00 m N
System Type	Treatment and Distribution
Notes	Treatment process consists of Primary and Secondary disinfection by chlorination. On-site reservoir and clearwell is equipped with high lift pumping

Chlorination Disinfection System

Description	Primary and secondary disinfection system consisting of chlorination
Disinfection System	Well No. 1 One (1) chemical metering pump located within the Main Pumphouse equipped with a solution tank with a spill containment
	Well No. 2 and Well No. 4 One (1) chemical metering pump located within Well House No. 4 equipped with a solution tank with a spill containment
	One (1) chemical metering pump (off-line standby) stored at the Main Pumphouse
	One (1) on-line free chlorine residual analyser located on the high lift pump discharge line
	One (1) on-line turbidity analyser located on the high lift pump discharge line
Notes	

Storage Reservoir

On-site Storage Reservoir

Location	105 Main Street East, Merrickville, ON
UTM Coordinates	NAD 83: UTM Zone 18: 434020.00 m E, 4974014.00 m N
Description	Clearwell No. 1 - 17.5 m x 13.5 m x 3.5 m with a volume of 590 m ³ Clearwell No. 2 - 19.5 m x 2.6 m x 3.2 m with a volume of 141 m ³
Notes	Ultrasonic level measurement device located in Clearwell No. 1 and 2

High Lift Works

High Lift Pumps

Description	High Lift Pumping Station
Equipment	Three (3) Centrifugal high lift pumps <ul style="list-style-type: none"> - one (1) high lift pump rated at 17 L/s at a TDH of 50 m - one (1) high lift pump rated at 17 L/s at a TDH of 50 m - one (1) electrically driven fire pump rated at 64 L/s at a TDH of 57 m
	One (1) flow meter
Notes	

Emergency Power

Backup Power Supply

Description	One (1) 120 kW stand-by diesel generator set
Notes	located in a heated insulated building, located 20 metres north of the main pumphouse Fuel spill containment

Instrumentation and Control

SCADA System

Description	Process control and monitoring equipment
Notes	System control with data acquisition including various on-line analyzers and monitors, including the following regulatory equipment: <ul style="list-style-type: none"> - Free Chlorine Residual – Treated Water - Turbidity – Treated Water - Turbidity – Raw water - Flow meter – Each Well - Water Level – Clearwell 1 - Water Level - Clearwell 2 - Distribution Pressure – discharge to distribution - Free chlorine residual – discharge to distribution

Fuel Oil Systems

Fuel Storage Locations

Location	NAD 83: UTM Zone 18: 434028.00 m E, 4973993.00 m N 105 Main Street East, Merrickville, ON
Description	There is one (1) back-up power generator located 20m north of the main pump house with an on-site fuel storage volume >2500 L
Fuel Type	Diesel
Source Protection Area	Mississippi-Rideau Source Protection Region
Notes	Risk: WHPA-A >8 Vulnerability low

Watermains

1.2 Watermains within the distribution system comprise:

1.2.1 Watermains that have been set out in each document or file identified in column 1 of Table 1.

Table 1: Watermains	
Column 1 Document or File Name	Column 2 Date
Merrickville-Distribution Drawings.pdf Merrickville-Distribution Drawings1.pdf Merrickville-Distribution Drawings2.pdf	March 3, 2017

1.2.2 Watermains that have been added, modified, replaced or extended further to the provisions of Schedule C of this drinking water works permit on or after the date identified in column 2 of Table 1 for each document or file identified in column 1.

1.2.3 Watermains that have been added, modified, replaced or extended further to an authorization by the Director on or after the date identified in column 2 of Table 1 for each document or file identified in column 1.

Schedule B: General

System Owner	The Corporation of the Village of Merrickville-Wolford
Permit Number	264-201
Drinking Water System Name	Merrickville Drinking Water System
Permit Effective Date	November 19, 2021

1.0 Applicability

- 1.1 In addition to any other applicable legal requirements, the drinking water system identified above shall be altered and operated in accordance with the conditions of this drinking water works permit and the licence #264-101.
- 1.2 The definitions and conditions of licence #264-101 are incorporated into this permit and also apply to this drinking water system.

2.0 Alterations to the Drinking Water System

- 2.1 Any document issued by the Director to be incorporated into Schedule C to this drinking water works permit shall provide authority to alter the drinking water system in accordance with the applicable conditions of this drinking water works permit and licence #264-101.
 - 2.2 All documents issued by the Director as described in condition 2.1 shall form part of this drinking water works permit.
 - 2.3 All parts of the drinking water system in contact with drinking water that are added, modified, replaced, extended shall be disinfected in accordance with a procedure approved by the Director or in accordance with the applicable provisions of the following documents:
 - a) Until May 18, 2022, the ministry's Watermain Disinfection Procedure, dated November 2015. As of May 19, 2022, the ministry's Watermain Disinfection Procedure, dated August 1, 2020;
 - b) Subject to condition 2.3.2, any updated version of the ministry's Watermain Disinfection Procedure;
 - c) AWWA C652 – Standard for Disinfection of Water-Storage Facilities;
 - d) AWWA C653 – Standard for Disinfection of Water Treatment Plants; and
 - e) AWWA C654 – Standard for Disinfection of Wells.
- 1.0 For greater clarity, where an activity has occurred that could introduce contamination, including but not limited to repair, maintenance, or physical / video inspection, all equipment that may come in contact with the drinking water system shall be disinfected in accordance with the requirements of condition 2.3. above.
 - 2.3.2 Updated requirements described in condition 2.3 b) are effective six months from the date of publication of the updated Watermain Disinfection Procedure.

- 2.4 The owner shall notify the Director in writing within thirty (30) days of the placing into service or the completion of any addition, modification, replacement, removal or extension of the drinking water system which had been authorized through:
- 2.4.1 Schedule B to this drinking water works permit which would require an alteration of the description of a drinking water system component described in Schedule A of this drinking water works permit;
 - 2.4.2 Any document to be incorporated in Schedule C to this drinking water works permit respecting works other than watermains; or
 - 2.4.3 Any approval issued prior to the issue date of the first drinking water works permit respecting works other than watermains which were not in service at the time of the issuance of the first drinking water works permit.
- 2.5 The notification required in condition 2.4 shall be submitted using the “Director Notification Form” published by the Ministry.
- 2.6 For greater certainty, the notification requirements set out in condition 2.4 do not apply to any addition, modification, replacement, removal or extension in respect of the drinking water system which:
- 2.6.1 Is exempt from subsection 31(1) of the SDWA by subsection 9.(2) of O. Reg. 170/03;
 - 2.6.2 Constitutes maintenance or repair of the drinking water system; or
 - 2.6.3 Is a watermain authorized by condition 3.1 of Schedule B of this drinking water works permit.
- 2.7 The owner shall notify the legal owner of any part of the drinking water system that is prescribed as a municipal drinking water system by section 2 of O. Reg. 172/03 of the requirements of the licence and this drinking water works permit as applicable to the prescribed system.
- 2.8 For greater certainty, the owner may only carry out alterations to the drinking water system in accordance with this drinking water works permit after having satisfied other applicable legal obligations, including those arising from the *Environmental Assessment Act*, *Niagara Escarpment Planning and Development Act*, *Oak Ridges Moraine Conservation Act, 2001* and *Greenbelt Act, 2005*.

3.0 Watermain Additions, Modifications, Replacements and Extensions

- 3.1 The owner may alter the drinking water system, or permit it to be altered by a person acting on the owner’s behalf, by adding, modifying, replacing or extending a watermain within the distribution system subject to the following conditions:
- 3.1.1 The design of the watermain addition, modification, replacement or extension:
 - a) Has been prepared by a licensed engineering practitioner;

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- b) Has been designed only to transmit water and has not been designed to treat water;
 - c) Satisfies the design criteria set out in the Ministry publication “Watermain Design Criteria for Future Alterations Authorized under a Drinking Water Works Permit – June 2012”, as amended from time to time; and
 - d) Is consistent with or otherwise addresses the design objectives contained within the Ministry publication “Design Guidelines for Drinking Water Systems, 2008”, as amended from time to time.
- 3.1.2 The maximum demand for water exerted by consumers who are serviced by the addition, modification, replacement or extension of the watermain will not result in an exceedance of the rated capacity of a treatment subsystem or the maximum flow rate for a treatment subsystem component as specified in the licence, or the creation of adverse conditions within the drinking water system.
- 3.1.3 The watermain addition, modification, replacement or extension will not adversely affect the distribution system’s ability to maintain a minimum pressure of 140 kPa at ground level at all points in the distribution system under maximum day demand plus fire flow conditions.
- 3.1.4 Secondary disinfection will be provided to water within the added, modified, replaced or extended watermain to meet the requirements of O. Reg. 170/03.
- 3.1.5 The watermain addition, modification, replacement or extension is wholly located within the municipal boundary over which the owner has jurisdiction.
- 3.1.6 The owner of the drinking water system consents in writing to the watermain addition, modification, replacement or extension.
- 3.1.7 A licensed engineering practitioner has verified in writing that the watermain addition, modification, replacement or extension meets the requirements of condition 3.1.1.
- 3.1.8 The owner of the drinking water system has verified in writing that the watermain addition, modification, replacement or extension meets the requirements of conditions 3.1.2 to 3.1.6.
- 3.2 The authorization for the addition, modification, replacement or extension of a watermain provided for in condition 3.1 does not include the addition, modification, replacement or extension of a watermain that:
- 3.2.1 Passes under or through a body of surface water, unless trenchless construction methods are used;
 - 3.2.2 Has a nominal diameter greater than 750 mm;
 - 3.2.3 Results in the fragmentation of the drinking water system; or
 - 3.2.4 Connects to another drinking water system, unless:

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- a) Prior to construction, the owner of the drinking water system seeking the connection obtains written consent from the owner or owner's delegate of the drinking water system being connected to; and
 - b) The owner of the drinking water system seeking the connection retains a copy of the written consent from the owner or owner's delegate of the drinking water system being connected to as part of the record that is recorded and retained under condition 3.3.
- 3.3 The verifications required in conditions 3.1.7 and 3.1.8 shall be:
- 3.3.1 Recorded on "Form 1 – Record of Watermains Authorized as a Future Alteration", as published by the Ministry, prior to the watermain addition, modification, replacement or extension being placed into service; and
 - 3.3.2 Retained for a period of ten (10) years by the owner.
- 3.4 For greater certainty, the verification requirements set out in condition 3.3 do not apply to any addition, modification, replacement or extension in respect of the drinking water system which:
- 3.4.1 Is exempt from subsection 31(1) of the SDWA by subsection 9.(2) of O. Reg. 170/03; or
 - 3.4.2 Constitutes maintenance or repair of the drinking water system.
- 3.5 The document or file referenced in Column 1 of Table 1 of Schedule A of this drinking water works permit that sets out watermains shall be retained by the owner and shall be updated to include watermain additions, modifications, replacements and extensions within 12 months of the addition, modification, replacement or extension.
- 3.6 The updates required by condition 3.5 shall include watermain location relative to named streets or easements and watermain diameter.
- 3.7 Despite clause (a) of condition 3.1.1 and condition 3.1.7, with respect to the replacement of an existing watermain or section of watermain that is 6.1 meters in length or less, if a licensed engineering practitioner has:
- 3.7.1 inspected the replacement prior to it being put into service;
 - 3.7.2 prepared a reporting confirming that the replacement satisfies clauses (b), (c) and (d) of condition 3.1.1 (i.e. "Form 1 – Record of Watermains Authorized by a Future Alteration" (Form 1), Part 3, items No. 2, 3 and 4); and
 - 3.7.3 appended the report referred to in condition 3.7.2 to the completed Form 1,
- the replacement is exempt from the requirements that the design of the replacement be prepared by a licensed engineering practitioner and that a licensed engineering practitioner verify on Form 1, Part 3, item No. 1 that a licensed engineering practitioner prepared the design of the replacement.
- 3.8 For greater certainty, the exemption in condition 3.7 does not apply to the replacement of an existing watermain or section of watermain if two or more sections of pipe, each of

which is 6.1 meters in length or less, are joined together, if the total length of replacement pipes joined together is greater than 6.1 meters.

4.0 Minor Modifications to the Drinking Water System

- 4.1 The drinking water system may be altered by adding, modifying or replacing the following components in the drinking water system:
- 4.1.1 Coagulant feed systems in the treatment system, including the location and number of dosing points:
 - a) Prior to making any alteration to the drinking water system under condition 4.1.1, the owner shall undertake a review of the impacts that the alteration might have on corrosion control or other treatment processes; and
 - b) The owner shall notify the Director in writing within thirty (30) days of any alteration made under condition 4.1.1 and shall provide the Director with a copy of the review.
 - c) The notification required in condition 4.1.1 b) shall be submitted using the "Director Notification Form" published by the Ministry
 - 4.1.2 Instrumentation and controls, including new SCADA systems and upgrades to SCADA system hardware;
 - 4.1.3 SCADA system software or programming that:
 - a) Measures, monitors or reports on a regulated parameter;
 - b) Measures, monitor or reports on a parameter that is used to calculate CT; or,
 - c) Calculates CT for the system or is part of the process algorithm that calculates log removal, where the impacts of addition, modification or replacement have been reviewed by a licensed engineering practitioner;
 - 4.1.4 Filter media, backwashing equipment, filter troughs, and under-drains and associated equipment in the treatment system;
 - 4.1.5 Spill containment works; or,
 - 4.1.6 Coarse screens and fine screens
- 4.2 The drinking water system may be altered by adding, modifying, replacing or removing the following components in the drinking water system:
- 4.2.1 Treated water pumps, pressure tanks, and associated equipment;
 - 4.2.2 Raw water pumps and process pumps in the treatment system;

-
- 4.2.3 In-line booster pumping stations that are not associated with distribution system storage facilities and are on a watermain with a nominal diameter not exceeding 200 mm;
 - 4.2.4 Re-circulation devices within distribution system storage facilities;
 - 4.2.5 In-line mixing equipment;
 - 4.2.6 Chemical metering pumps and chemical handling pumps;
 - 4.2.7 Chemical storage tanks (excluding fuel storage tanks) and associated equipment; or,
 - 4.2.8 Measuring and monitoring devices that are not required by regulation, by a condition in the Drinking Water Works Permit, or by a condition otherwise imposed by the Ministry.
 - 4.2.9 Chemical injection points.
 - 4.2.10 Valves;
- 4.3 The drinking water system may be altered by replacing the following:
- 4.3.1 Raw water piping, treatment process piping or treated water piping within the treatment subsystem;
 - 4.3.2 Measuring and monitoring devices that are required by regulation, by a condition in the Drinking Water Works Permit or by a condition otherwise imposed by the Ministry.
 - 4.3.3 Coagulants and pH adjustment chemicals, where the replacement chemicals perform the same function;
 - a) Prior to making any alteration to the drinking water system under condition 4.3.3, the owner shall undertake a review of the impacts that the alteration might have on corrosion control or other treatment processes; and
 - b) The owner shall notify the Director in writing within thirty (30) days of any alteration made under condition 4.3.3 and shall provide the Director with a copy of the review.
 - c) The notification required in condition 4.3.3 b) shall be submitted using the "Director Notification Form" published by the Ministry
- 4.4 Any alteration of the drinking water system made under conditions 4.1, 4.2 or 4.3 shall not result in:
- 4.4.1 An exceedance of a treatment subsystem rated capacity or a treatment subsystem component maximum flow rate as specified in the licence;
 - 4.4.2 The bypassing or removal of any unit process within a treatment subsystem;

- 4.4.3 The addition of any new unit process other than coagulation within a treatment subsystem;
 - 4.4.4 A deterioration in the quality of drinking water provided to consumers;
 - 4.4.5 A reduction in the reliability or redundancy of any component of the drinking water system;
 - 4.4.6 A negative impact on the ability to undertake compliance and other monitoring necessary for the operation of the drinking water system; or
 - 4.4.7 An adverse effect on the environment.
- 4.5 The owner shall verify in writing that any addition, modification, replacement or removal of drinking water system components in accordance with conditions 4.1, 4.2 or 4.3 has met the requirements of the conditions listed in condition 4.4.
- 4.6 The verifications and documentation required in condition 4.5 shall be:
- 4.6.1 Recorded on “Form 2 – Record of Minor Modifications or Replacements to the Drinking Water System” published by the Ministry, prior to the modified or replaced components being placed into service; and
 - 4.6.2 Retained for a period of ten (10) years by the owner.
- 4.7 For greater certainty, the verification requirements set out in conditions 4.5 and 4.6 do not apply to any addition, modification, replacement or removal in respect of the drinking water system which:
- 4.7.1 Is exempt from subsection 31(1) of the SDWA by subsection 9.(2) of O. Reg. 170/03; or
 - 4.7.2 Constitutes maintenance or repair of the drinking water system, including software changes to a SCADA system that are not listed in condition 4.1.3
- 4.8 The owner shall update any drawings maintained for the drinking water system to reflect the modification or replacement of the works, where applicable.

5.0 Equipment with Emissions to the Air

- 5.1 The drinking water system may be altered by adding, modifying or replacing any of the following drinking water system components that may discharge or alter the rate or manner of a discharge of a compound of concern to the air:
- 5.1.1 Any equipment, apparatus, mechanism or thing that is used for the transfer of outdoor air into a building or structure that is not a cooling tower;
 - 5.1.2 Any equipment, apparatus, mechanism or thing that is used for the transfer of indoor air out of a space used for the production, processing, repair, maintenance or storage of goods or materials, including chemical storage;

-
- 5.1.3 Laboratory fume hoods used for drinking water testing, quality control and quality assurance purposes;
 - 5.1.4 Low temperature handling of compounds with a vapor pressure of less than 1 kilopascal;
 - 5.1.5 Maintenance welding stations;
 - 5.1.6 Minor painting operations used for maintenance purposes;
 - 5.1.7 Parts washers for maintenance shops;
 - 5.1.8 Emergency chlorine and ammonia gas scrubbers and absorbers;
 - 5.1.9 Venting for activated carbon units for drinking water taste and odour control;
 - 5.1.10 Venting for a stripping unit for methane removal from a groundwater supply;
 - 5.1.11 Venting for an ozone treatment unit;
 - 5.1.12 Natural gas or propane fired boilers, water heaters, space heaters and make-up air units with a total facility-wide heat input rating of less than 20 million kilojoules per hour, and with an individual fuel energy input of less than or equal to 10.5 gigajoules per hour; or
 - 5.1.13 Emergency generators that fire No. 2 fuel oil (diesel fuel) with a sulphur content of 0.5 per cent or less measured by weight, natural gas, propane, gasoline or biofuel, and that are used for emergency duty only with periodic testing.
- 5.2 The owner shall not make an addition, modification, or replacement described in condition 5.1 in relation to an activity that is not related to the treatment and/or distribution of drinking water.
 - 5.3 The emergency generators identified in condition 5.1.13 shall not be used for non-emergency purposes including the generation of electricity for sale or for peak shaving purposes.
 - 5.4 The owner shall prepare an emission summary table for nitrogen oxides emissions only, for each addition, modification or replacement of emergency generators identified in condition 5.1.13.

Performance Limits

- 5.5 The owner shall ensure that a drinking water system component identified in conditions 5.1.1 to 5.1.13 is operated at all times to comply with the following limits:
 - 5.5.1 For equipment other than emergency generators, the maximum concentration of any compound of concern at a point of impingement shall not exceed the corresponding point of impingement limit;
 - 5.5.2 For emergency generators, the maximum concentration of nitrogen oxides at sensitive receptors shall not exceed the applicable point of impingement limit,

and at non-sensitive receptors shall not exceed the Ministry half-hourly screening level of 1880 ug/m³ as amended; and

- 5.5.3 The noise emissions comply at all times with the limits set out in publication NPC-300, as applicable.
- 5.6 The owner shall verify in writing that any addition, modification or replacement of works in accordance with condition 5.1 has met the requirements of the conditions listed in condition 5.5.
- 5.7 The owner shall document how compliance with the performance limits outlined in condition 5.5.3 is being achieved, through noise abatement equipment and/or operational procedures.
- 5.8 The verifications and documentation required in conditions 5.6 and 5.7 shall be:
 - 5.8.1 Recorded on “Form 3 – Record of Addition, Modification or Replacement of Equipment Discharging a Contaminant of Concern to the Atmosphere”, as published by the Ministry, prior to the additional, modified or replacement equipment being placed into service; and
 - 5.8.2 Retained for a period of ten (10) years by the owner.
- 5.9 For greater certainty, the verification and documentation requirements set out in conditions 5.6 and 5.8 do not apply to any addition, modification or replacement in respect of the drinking water system which:
 - 5.9.1 Is exempt from subsection 31(1) of the SDWA by subsection 9.(2) of O. Reg. 170/03; or
 - 5.9.2 Constitutes maintenance or repair of the drinking water system.
- 5.10 The owner shall update any drawings maintained for the works to reflect the addition, modification or replacement of the works, where applicable.

6.0 Previously Approved Works

- 6.1 The owner may add, modify, replace or extend, and operate part of a municipal drinking water system if:
 - 6.1.1 An approval was issued after January 1, 2004 under section 36 of the SDWA in respect of the addition, modification, replacement or extension and operation of that part of the municipal drinking water system;
 - 6.1.2 The approval expired by virtue of subsection 36(4) of the SDWA; and
 - 6.1.3 The addition, modification, replacement or extension commenced within five years of the date that activity was approved by the expired approval.

7.0 System-Specific Conditions

- 7.1 Not applicable.

8.0 Source Protection

8.1 Not applicable

Schedule C: Authorization to Alter the Drinking Water System

System Owner	The Corporation of the Village of Merrickville-Wolford
Permit Number	264-201
Drinking Water System Name	Merrickville Drinking Water System
Permit Effective Date	November 19, 2021

1.0 General

1.1 Table 2 provides a reference list of all documents to be incorporated into Schedule C that have been issued as of the date that this permit was issued.

1.1.1 Table 2 is not intended to be a comprehensive list of all documents that are part of Schedule C. For clarity, any document issued by the Director to be incorporated into Schedule C after this permit has been issued is considered part of this drinking water works permit.

Table 2: Schedule C Documents				
Column 1 Issue #	Column 2 Issued Date	Column 3 Description	Column 4 Status	Column 5 DN#
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

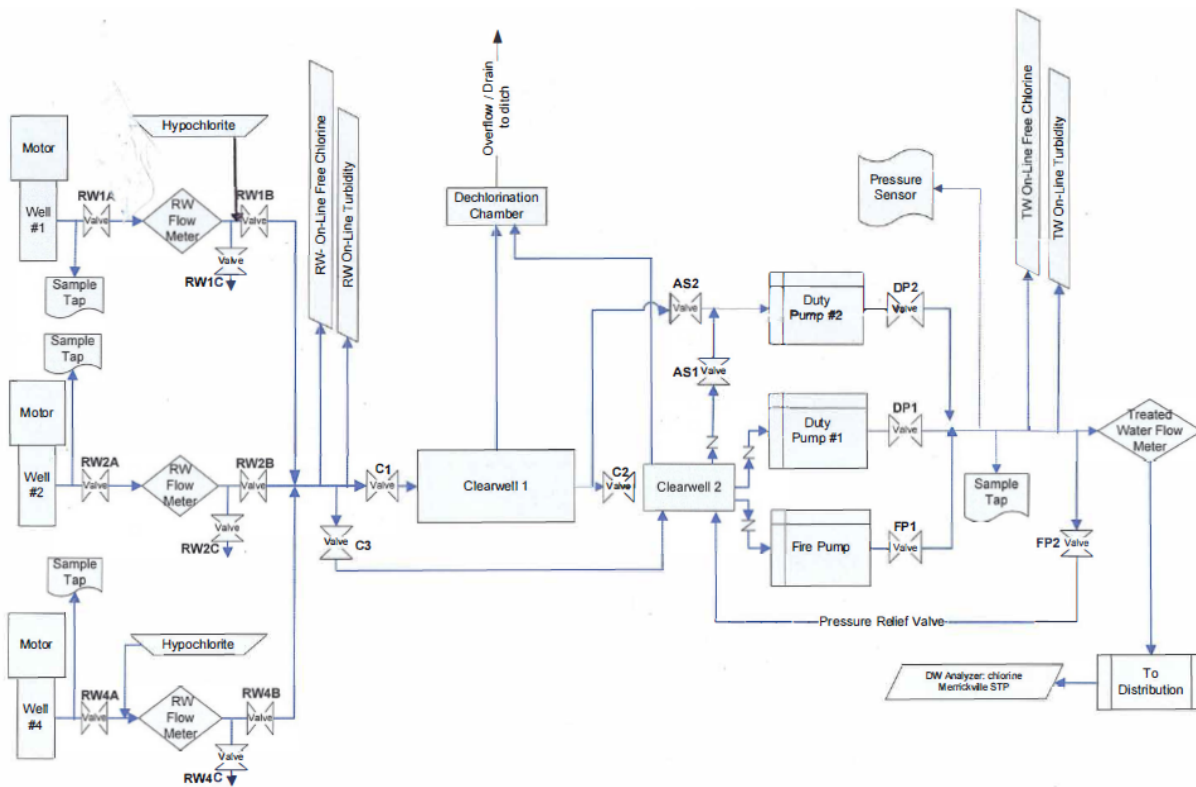
1.2 For each document described in columns 1, 2 and 3 of Table 2, the status of the document is indicated in column 4. Where this status is listed as 'Archived', the approved alterations have been completed and relevant portions of this permit have been updated to reflect the altered works. These 'Archived' Schedule C documents remain as a record of the alterations.

Schedule D: Process Flow Diagrams

System Owner	The Corporation of the Village of Merrickville-Wolford
Permit Number	264-201
Drinking Water System Name	Merrickville Drinking Water System
Permit Effective Date	November 19, 2021

1.0 Process Flow Diagrams

Merrickville Drinking Water System



[Source: Received by email dated January 11, 2021]

Note: this process flow diagram is for reference only, and represents a high level overview of the system as of January 11, 2021.

Village of Merrickville-Wolford
Water and Wastewater Facilities
Operation and Maintenance Services



SCHEDULE F: ENVIRONMENTAL COMPLIANCE APPROVAL

ENVIRONMENTAL COMPLIANCE APPROVAL For a Municipal Sewage Collection System

ECA Number: 264-W601

Issue Number: 1

Pursuant to the *Environmental Protection Act*, R.S.O 1990, c. E. 19 (EPA), and the regulations made thereunder and subject to the limitations thereof, this environmental compliance approval is issued under section 20.3 of Part II.1 of the EPA to:

Merrickville-Wolford, The Corporation of the Village of

**317 Brock St P.O. Box 340
Merrickville, ON K0G 1N0**

For the following Sewage Works:

Merrickville-Wolford Sewage Collection System

This Environmental Compliance Approval (ECA) includes the following:

Schedule	Description
Schedule A	System Information
Schedule B	Municipal Sewage Collection System Description
Schedule C	List of Notices of Amendment to this ECA: Additional Approved Works
Schedule D	General
Schedule E	Operating Conditions
Schedule F	Residue Management

All prior ECAs, or portions thereof, issued by the Director for Sewage Works described in section 1 of Schedule B are revoked and replaced by this Approval.

DATED at TORONTO this 16th day of May, 2023

Signature



Aziz Ahmed, P.Eng.
Director, Part II.1, *Environmental Protection Act*

Schedule A: System Information

System Owner	Merrickville-Wolford, The Corporation of the Village of
ECA Number	264-W601
System Name	Merrickville-Wolford Sewage Collection System
ECA Issue Date	May 16th, 2023

1.0 ECA Information and Mandatory Review Date

ECA Issue Date	May 16th, 2023
Application for ECA Review Due Date	February 15, 2029

1.1 Pursuant to section 20.12 of the EPA, the Owner shall submit an application for review of the Approval no later than the Application for ECA Review Date indicated above.

2.0 Related Documents

2.1 STPs, Satellite Treatment Facilities, and Pumping Stations connected to the Authorized System that are not part of the Authorized System:

System/Facility Name	Wastewater System Number	Location	ECA Number	Issue Date
Merrickville Sewage Treatment Plant	110001729	106 Collar Hill Rd Merrickville-Wolford Village, United Counties of Leeds and Grenville	1121-7YRQLF	January 18, 2010

2.2 Other Documents

Document Title	Version
Design Criteria for Sanitary Sewers, Storm Sewers, and Forcemains for Alterations Authorized under Environmental Compliance Approval	v.1.2 (Jan 23, 2023)

3.0 Asset Management Plan

Document Title	Version
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The Village of Merrickville-Wolford Asset Management Plan	2022
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4.0 Pollution Prevention and Control Plan (if applicable)

Document Title	Version
N/A	N/A

5.0 Operating Authority

System	Operating Authority
Village of Merrickville-Wolford – Wastewater Collection System	Ontario Clean Water Agency

Schedule B: Municipal Sewage Collection System Description

System Owner	Merrickville-Wolford, The Corporation of the Village of
ECA Number	264-W601
System Name	Merrickville-Wolford Sewage Collection System
ECA Issue Date	May 16th, 2023

1.0 System Description

- 1.1 The following is a summary description of the Sewage Works comprising the Municipal Sewage Collection System:

Overview

The Wastewater Collection System within the Municipality of Merrickville-Wolford consists of works for the collection and transmission of sewage, consisting of separate sewers, combined sewers, sewage pumping stations, and forcemains, with discharge into the Merrickville Sewage Treatment Plant.

Sewage Collection System

- 1.2 The Authorized System comprises:

- 1.2.1 The Sewage Works described and depicted in each document or file identified in column 1 of Table B1.

Table B1: Infrastructure Map	
Column 1 Document or File Name	Column 2 Date
Form 3 – Merrickville Sanitary	February 2022

- 1.2.2 Sewers, forcemains, pumping stations and other Sewage Works that have been added, modified, replaced, or extended through authorization provided in a Schedule C Notice respecting this Approval, where Completion occurs on or after the date identified in column 2 of Table B1 for each document or file identified in column 1.
- 1.2.3 Sewers, forcemains, pumping stations and other Sewage Works that have been added, modified, replaced, or extended through authorization provided in Schedule D of this Approval, where Completion occurs on or after the date identified in column 2 of Table B1 for each document or file identified in column 1.

1.2.4 Any Sewage Works described in conditions 1.3, through 1.7 below.

Sewage Pumping Stations

1.3 The following are Sewage pumping stations in the Authorized System:

Sanitary Sewage Pumping #1

Asset ID and Name	Sewage Pumping Station #1
Site Location	320 Main Street East Merrickville-Wolford Village, United Counties of Leeds and Grenville, Ontario
Latitude and Longitude	44°54'58.9"N 75°49'54.8"W
Coordinates (optional)	
Description	Pumping Station #1 (upgraded in 2010) servicing the Village of Merrickville-Wolford.
Pumping Station Capacity	29 litres L/s at TDH of 35 m Total peak flow rate of 44 L/s at TDH of 45 m
Equipment	Three (3) submersible sewage pumps, three (3) for duty each pump has a rated capacity of 29 L/s against a TDH of 35 m, capable of handling a total peak flow rate of 44 L/s at a TDH of 45 m. The station is connected to a 150 mm diameter forcemain, discharging to an inlet chamber of Merrickville STP.
Emergency Storage	N/A
Equipment: Associated controls and Appurtenances	Duty level control system with back-up float switches connected to pump controller located inside an onsite control building and connected to SCADA system of Merrickville- Wolford Sewage Treatment Plant.
Sewage Pumping Station – Collection System Overflow	Overflow pipe discharging to Rideau River 44.91715N, 75.83215 W
Receiving Stations (if applicable)	N/A
Odour Control Units	N/A
Standby Power	100 kilowatts standby diesel generator set
Reference ECA(s)	5838-7YHMN6
Notes	Discharges to Sewage Treatment Plant

Sanitary Sewage Pumping #2 (NOT IN USE – Future Development Planning)

Asset ID and Name	Sewage Pumping Station #2 (Not In Use)
Site Location	Merrickville-Wolford Village, United Counties of Leeds and Grenville, Ontario
Latitude and Longitude	

Coordinates (optional)	
Description	Pumping Station previously constructed for future use; not in operation at this time
Pumping Station Capacity	Design Capacity 24 litres L/s at TDH of 11.3 m
Equipment	Designed for Two (2) submersible sewage pumps (1 duty, 1 standby), each rated at 24 litres L/s at TDH of 11.3 m with a 6 HP, 1750 PPM motor. The station is connected to a 150 mm diameter forcemain. Currently no pumps at station.
Emergency Storage	N/A
Equipment: Associated controls and Appurtenances	N/A
Sewage Pumping Station – Collection System Overflow	79 metres of 450 millimetre diameter overflow pipe discharging to Rideau River (Not used)
Receiving Stations (if applicable)	N/A
Odor Control Units	N/A
Standby Power	N/A
Reference ECA(s)	5838-7YHMN6
Notes	N/A

Real-Time Control

1.4 The following are identified Real-Time Control Systems in the Authorized System:

Description	
Process Equipment/System Elements	N/A
Flow Measurement Locations	
Level Measurement Locations	
Other Instrumentation and Controls	

Combined Sewage Structures

1.5 The following are regulators and combined Sewage storage structures in the Authorized System:

Table B2: Identified Combined Sewer Overflow Regulators			
Column 1 Asset ID/Name	Column 2 Site Location (Latitude & Longitude)	Column 3 Regulator Capacity (m ³ /s)	Column 4 Overflow Location (Latitude & Longitude)
N/A			

Table B3: Identified Combined Sewage Storage Tanks and Storage Structures			
Column 1 Asset ID/Name	Column 2 Site Location (Latitude & Longitude)	Column 3 Regulator Capacity (m ³ /s)	Column 4 Overflow Location (Latitude & Longitude)
N/A			

Collection System Overflow Points

1.6 The following are Collection System Overflow points in the Authorized System:

Table B4: Identified Combined Sewer Overflow Points including Pumping Stations			
Column 1 Asset ID / Name	Column 2 Regulator or Combined Sewer Storage Asset ID	Column 3 Overflow Location (Latitude & Longitude)	Column 4 Point of Entry to Receiver (Latitude and Longitude)
N/A			

Table B5: Identified Sanitary Sewer Overflow Points including Pumping Stations			
Column 1 Asset ID	Column 2 Asset Name	Column 3 Overflow Location (Latitude & Longitude)	Column 4 Point of Entry to Receiver (Latitude and Longitude)
1	Sanitary Sewage Pumping Station #1	44.91715N, 75.83215 W	N/A

Other Works:

1.7 The following works are part of Authorized System:

Table B6: Other Works			
Column 1 Asset ID / Name	Column 2 Site Location (Latitude & Longitude)	Column 3 Component	Column 4 Description
N/A			

**Schedule C: List of Notices of Amendment to this ECA:
Additional Approved Sewage Works**

System Owner	Merrickville-Wolford, The Corporation of the Village of
ECA Number	264-W601
System Name	Merrickville-Wolford Sewage Collection System
ECA Issue Date	May 16th, 2023

1.0 General

1.1 Table C1 provides a list of all notices of amendment to this Approval that have been issued pursuant to clause 20.3(1) of the EPA that impose terms and conditions in respect of the Authorized System after consideration of an application by the Director (Schedule C Notices).

Table C1: Schedule C Notices				
Column 1 Issue #	Column 2 Issue Date	Column 3 Description	Column 4 Status	Column 5 DN#
N/A	N/A	N/A	N/A	N/A

Schedule D: General

System Owner	Merrickville-Wolford, The Corporation of the Village of
ECA Number	264-W601
System Name	Merrickville-Wolford Sewage Collection System
ECA Issue Date	May 16th, 2023

1.0 Definitions

1.1 For the purpose of this Approval, the following definitions apply:

“Adverse Effect(s)” has the same meaning as defined in section 1 of the EPA.

“Alteration(s)” includes the following, in respect of the Authorized System, but does not include repairs to the system:

- a) An extension of the system,
- b) A replacement or retirement of part of the system, or
- c) A modification of, addition to, or enlargement of the system.

“Approval” means this Environmental Compliance Approval including any Schedules attached to it.

“Appurtenance(s)” has the same meaning as defined in O. Reg. 525/98 (Approval Exemptions) made under the OWRA.

“Authorized System” means the Sewage Works comprising the Municipal Sewage Collection System authorized under this Approval”.

“Average Year” means the long term average of flow based on:

- a) Simulation of at least twenty years of rainfall data;
- b) A year in which the rainfall pattern (e.g., intensity, volume, and frequency) is consistent with the long-term mean of the area;
- c) A year in which the runoff pattern resulting from the rainfall (e.g., rate, volume, and frequency) is consistent with the long-term mean of the area; or
- d) Any combination of a), b) and c).

“Collection System Overflow(s)” means a discharge (SSO or CSO) to the environment at designed location(s) from the Authorized System.

“Combined Sewer(s)” means pipes that collect and transmit both sanitary Sewage and other Sewage from residential, commercial, institutional and industrial buildings, and facilities and Stormwater through a single-pipe system, but does not include Nominally Separate Sewers.

“Completion” means substantial performance as described in s.2 (1) of the *Construction Act*, R.S.O. 1990, c. C.30.

“Compound of Concern” means a Contaminant that is discharged from the Facility in an amount that is not negligible.

“Contaminant” has the same meaning as defined in section 1 of the EPA.

“CSO” means a combined sewer overflow which is a discharge to the environment at designated location(s) from a Combined Sewer or Partially Separated Sewer as per Table B4 that usually occurs as a result of precipitation when the capacity of the Sewer is exceeded. An intervening time of twelve hours or greater separating a CSO from the last prior CSO at the same location is considered to separate one overflow Event from another.

“CWA” means the *Clean Water Act*, R.S.O. 2006, c.22.

“Design Criteria” means the design criteria set out in the Ministry’s publication “Design Criteria for Sanitary Sewers, Storm Sewers and Forcemains for Alterations Authorized under Environmental Compliance Approval”, (as amended from time to time).

“Design Guidelines for Sewage Works” means the Ministry document titled “Design Guidelines for Sewage Works”, 2008 (as amended from time to time).

“Director” means a person appointed by the Minister pursuant to section 5 of the EPA for the purposes of Part II.1 of EPA (Environmental Compliance Approvals).

“Director Notification Form” means the most recent version of the Ministry form titled Director Notification – Alterations to a Municipal Sewage Collection System, as obtained directly from the Ministry or from the Ministry’s website.

“District Manager” means the district manager or a designated representative of the Local Ministry Office.

“Dry Weather Flow(s)” means Sewage flow resulting from both sanitary Sewage, and infiltration and inflows from foundation drains or other drains occurring during periods with an absence of rainfall or snowmelt.

"EAA" means the *Environmental Assessment Act*, R.S.O. 1990, c. E.18.

"EPA" means the *Environmental Protection Act*, R.S.O. 1990, c.E.19.

"Emergency Situation" means a structural, mechanical, electrical failure, or operational health and safety incident, that causes a temporary reduction in the capacity, function, or performance of any part of the Authorized System or an unforeseen flow condition that may result in:

- a) Danger to the health or safety of any person;
- b) Injury or damage to any property, or serious risk of injury or damage to any property;
- c) Adverse Effect to the Natural Environment; or
- d) Spill.

“Equipment” means equipment or processes described in this Approval and any other equipment or process that supports the operation or maintenance of the Authorized System.

“ESC” means erosion and sediment control.

"Event(s)" means an action or occurrence, at any given location within the Authorized System that causes a Collection System Overflow. An Event ends when there is no recurrence of a CSO or SSO in the collection system at the same location in the 12-hour period following the last Collection System Overflow.

“Facility” means the entire operation located on the property where the Sewage Works or Equipment is located.

“Form A1” means the most recent version of the Ministry form titled Record of Future Alteration Authorized for Equipment Discharging a Contaminant of Concern to the Atmosphere from a Municipal Sewage Collection System, as obtained directly from the Ministry or from the Ministry’s website.

“Form CS1” means the most recent version of the Ministry form titled Record of Future Alteration Authorized for Combined Sewers/Partially Separated Sewers/Combined Sewage Storage Tanks and Storage Structures as obtained directly from the Ministry or from the Ministry’s website.

“**Form SS1**” means the most recent version of the Ministry form titled Record of Future Alteration Authorized for Separate Sewers/Nominally Separate Sewers/Forcemains, as obtained directly from the Ministry or from the Ministry’s website.

“**Form SS2**” means the most recent version of the Ministry form titled Record of Future Alteration Authorized for Components of the Municipal Sewage Collection System, as obtained directly from the Ministry or from the Ministry’s website.

“**Hauled Sewage**” has the same meaning as defined in section 1 of Regulation 347 (General – Waste Management) made under the EPA.

“**Licensed Engineering Practitioner**” means a person who holds a licence, limited licence, or temporary licence under the *Ontario Professional Engineers Act* R.S.O. 1990, c. P.28.

“**Local Ministry Office**” means the local office of the Ministry responsible for the geographic area where the Authorized System is located.

“**Minister**” means the Minister of the Ministry, or such other member of the Executive Council as may be assigned the administration of the EPA and OWRA under the *Executive Council Act*, R.S.O. 1990, c. E.25.

“**Ministry**” means the Ministry of the Minister and includes all employees or other persons acting on its behalf.

“**Municipal Sewage Collection System**” means all Sewage Works, located in the geographical area of a municipality that collect and transmit Sewage and are owned, or may be owned pursuant to an agreement with a municipality entered into under the *Planning Act* or *Development Charges Act*, 1997, by:

- a) A municipality, a municipal service board established under the *Municipal Act*, 2001 or a city board established under the *City of Toronto Act*, 2006; or
- b) A corporation established under sections 9, 10, and 11 of the *Municipal Act*, 2001 in accordance with section 203 of that Act or under sections 7 and 8 of the *City of Toronto Act*, 2006 in accordance with sections 148 and 154 of that Act.

“**Natural Environment**” has the same meaning as defined in section 1 of the EPA.

“**Nominally Separate Sewer(s)**” mean Separate Sewers that also have connections from roof leaders and foundation drains, and are not considered to be Combined Sewers.

“Operating Authority” means, in respect of the Authorized System, the person, entity, or assignee that is given responsibility by the Owner for the operation, management, maintenance or Alteration of the Authorized System or a portion of the Authorized System.

"Owner" for the purposes of this Approval means The Corporation of the Village of Merrickville-Wolford and includes its successors and assigns.

"OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40.

“O&M Manual” means the operation and maintenance manual prepared and maintained by the Owner under condition 3.2 in Schedule E of this Approval.

"Partially Separated Sewer(s)" means Combined Sewers that have been retrofitted to transmit sanitary Sewage but in which roof leaders or foundation drains still contribute Stormwater inflow to the Partially Separated Sewer.

“Peak Hourly Flow” means the the largest volume of flow to be received during a one-hour period expressed as a volume per unit time. This is also referred to as maximum hourly flow or maximum hour flow.

“Point of Entry” has same meaning as in the Wastewater Systems Effluent Regulations (SOR/2012-139) under the *Fisheries Act*, R.S.C 1985, c. F-14.

“Pollution Prevention and Control Plan” or “PPCP” means a plan developed for Combined Sewers in the Authorized System to meet the goals of Procedure F-5-5.

"Prescribed Person" means a person prescribed in O. Reg. 208/19 (Environmental Compliance Approval in Respect of Sewage Works) for the purpose of ss. 20.6 (1) of the EPA, and where the alteration, extension, enlargement, or replacement is carried out under an agreement with the Owner.

"Procedure F-5-1" means the Ministry document titled “F-5-1 Determination of Treatment Requirements for Municipal and Private Sewage Treatment Works” (as amended from time to time).

"Procedure F-5-5" means the Ministry document titled “F-5-5 Determination of Treatment Requirements for Municipal and Private Combined and Partially Separated Sewer System” (as amended from time to time).

"Publication NPC-207" means the Ministry draft technical publication "Impulse Vibration in Residential Buildings", November 1983,

supplementing the Model Municipal Noise Control By-Law, Final Report, August 1978, (as amended from time to time).

“**Publication NPC-300**” means the Ministry publication NPC-300, “Environmental Noise Guideline: Stationary and Transportation Sources – Approval and Planning” August 2013, (as amended from time to time).

“**Pumping Station Capacity**” means the design Peak Hourly Flow of Sewage which the Sewage pumping station is designed to handle.

“**Real-time Control System**” means the dynamic operation of the collection system, including Real-Time Physical Control Structures, by responding to continuous field monitoring to maintain and achieve performance and operational objectives, during dry and wet weather conditions.

“**Real-time Physical Control Structure**” means a structure (e.g., pumps, gates, and weirs) that reacts in real-time based on direction from the Real-Time Control System.

“**Regulator Capacity**” means the flowrate (m^3/s) at which Collection System Overflow begins.

“**SAC**” means the Ministry’s Spills Action Centre.

“**SCADA**” means a supervisory control and data acquisition system used for process monitoring, control, automation, recording, and/or reporting within the Sewage system.

“**Schedule C Notice(s)**” means a notice(s) of amendment to this Approval issued pursuant to clause 20.3(1) of the EPA that imposes terms and conditions in respect of the Authorized System after consideration of an application by the Director.

“**Separate Sewer(s)**” means pipes that collect and transmit sanitary Sewage and other Sewage from residential, commercial, institutional, and industrial buildings.

“**Sewage**” has the same meaning as defined in section 1 of the OWRA.

“**Sewage Works**” has the same meaning as defined in section 1 of the OWRA.

“**Sewer**” has the same meaning as defined in section 1 of O. Reg. 525/98 under the OWRA.

“**Significant Drinking Water Threat**” has the same meaning as defined in section 2 of the CWA.

“Significant Snowmelt Event(s)” means the melting of snow at a rate which adversely affects the performance and function of the Authorized System and/or the STP(s) identified in Schedule A of this Approval.

“Significant Storm Event(s)” means a minimum of 25 mm of rain in any 24 hours period.

“Source Protection Authority” has the same meaning as defined in section 2 of the CWA.

“Source Protection Plan” means a drinking water source protection plan prepared under the CWA.

“Spill(s)” has the same meaning as defined in subsection 91(1) of the EPA.

“SSO” means a sanitary sewer overflow which is a discharge of Sewage from a Separate Sewer or Nominally Separate Sewer to the environment from designated location(s) in the Authorized System as per Table B5.

“Standard Operating Policy for Sewage Works” means the standard operating policy developed by the Ministry to assist in the implementation of Source Protection Plan policies related to Sewage Works and providing minimum design and operational standards and considerations to mitigate risks to sources of drinking water, as amended from time to time.

“Storm Sewer” means Sewers that collect and transmit, but not exfiltrate or lose by design, Stormwater resulting from precipitation and snowmelt.

“Stormwater” means rainwater runoff, water runoff from roofs, snowmelt, and surface runoff.

“Stormwater Management Facility(ies)” means a Facility for the treatment, retention, infiltration, or control of Stormwater.

“STP” means sewage treatment plant.

“STP Bypass(es)” means diversion of Sewage around one or more treatment processes, excluding preliminary treatment system, within the STP with the diverted Sewage flows being returned to the STP treatment train upstream of the final effluent sampling point(s) and discharged via the approved effluent disposal facilities.

“STP Overflow(s)” means a discharge to the environment from the STP at designed location(s) other than the approved effluent disposal facilities or via the effluent disposal facilities downstream of the final effluent sampling point.

“Uncommitted Reserve Hydraulic Capacity” means uncommitted reserve capacity as described in the Ministry document titled “D-5-1 Calculating and Reporting Uncommitted Reserve Capacity at Sewage and Water Treatment Plants” (as amended from time to time).

“Undertaking” has the same meaning as in the EAA.

“Vulnerable Area(s)” has the same meaning as in the CWA.

“Wet Weather Flow(s)” means the flow resulting from the combination of sanitary Sewage and extraneous flows resulting from the inflow and infiltration of groundwater, rainfall or snowmelt, and snow or ice melt that enters the Authorized System.

2.0 General Conditions

- 2.1 The works comprising the Authorized System shall be constructed, installed, used, operated, maintained, replaced, or retired in accordance with the conditions of this Approval, which includes the following Schedules:

Schedule A – System Information

Schedule B – Municipal Sewage Collection System Description

Schedule C – List of Notices of Amendment to this ECA

Schedule D – General

Schedule E – Operating Conditions

Schedule F – Residue Management

- 2.2 The issuance of this Approval does not negate the requirements of other regulatory bodies, which includes but is not limited to, the Ministry of Northern Development, Mines, Natural Resources and Forestry and the local Conservation Authority.
- 2.3 Where there is a conflict between a provision of any document referred to in this Approval and the conditions of this Approval, the conditions in this Approval shall take precedence. Where there is a conflict between the information in a Schedule C Notice and another section of this Approval, the document bearing the most recent date shall prevail.
- 2.4 The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Authorized System is provided with a print or electronic copy of this Approval and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
- 2.5 The conditions of this Approval are severable. If any condition of this Approval, or the application of any requirement of this Approval to any circumstance, is held invalid or unenforceable, the application of such

condition to other circumstances and the remainder of this Approval shall not be affected thereby.

3.0 Alterations to the Municipal Sewage Collection System

- 3.1 Any Schedule C Notice shall provide authority to alter the Authorized System in accordance with the conditions of this Approval.
- 3.2 All Schedule C Notices issued by the Director for the Municipal Sewage Collection System shall form part of this Approval.
- 3.3 The Owner and a Prescribed Person shall ensure that the documentation required through conditions in this Approval and the documentation required in the Design Criteria are prepared for any Alteration of the Authorized System.
- 3.4 The Owner shall notify the Director within thirty (30) calendar days of the placing into service or Completion of any Alteration of the Authorized System which had been authorized:
 - 3.4.1 Under Schedule D to this Approval where the Alteration results in a change to Sewage Works or Equipment specifically described in Schedule B of this Approval;
 - 3.4.2 Through a Schedule C Notice respecting Sewage Works other than Sewers or forcemains; or
 - 3.4.3 Through another approval that was issued under the EPA prior to the issue date of this Approval.
- 3.5 The notification requirements set out in condition 3.4 do not apply to any Alteration in respect of the Authorized System which:
 - 3.5.1 Is exempt under section 53(6) of the OWRA or by O. Reg. 525/98;
 - 3.5.2 Constitutes maintenance or repair of the Authorized System; or
 - 3.5.3 Is a Sewer or forcemain authorized by condition 4.1 of Schedule D of this Approval.
- 3.6 The Owner shall notify the Director within ninety (90) calendar days of:
 - 3.6.1 The discovery of existing Sewage Works not described or depicted in Schedule B, or
 - 3.6.2 Additional or revised information becoming available for any Sewage Works or Equipment described in Schedule B of this Approval.

- 3.7 The notifications required in condition 3.4 and 3.6 shall be submitted to the Director using the Director Notification Form.
- 3.8 The Owner shall ensure that an ESC plan is prepared, and temporary ESC measures are installed in advance of and maintained during any construction activity on the Authorized System, subject to the following conditions:
- 3.8.1 Inspections of ESC measures are to be conducted at a frequency specified per the ESC plan, for dry weather periods (active and inactive construction phases), after Significant Storm Events and Significant Snowmelt Events, and after any extreme weather events.
- 3.8.2 Any deficiencies shall be addressed, and any required maintenance actions(s) shall be undertaken as soon as practicable once they have been identified.
- 3.8.3 Inspections and maintenance of the temporary ESC measures shall continue until they are no longer required.
- 3.8.4 The ESC plan, ESC measures and its installation, inspections and maintenance shall have regard to at least one of the following:
- a) CSA W202 Erosion and Sediment Control Inspection and Monitoring Standard, as amended from time to time;
 - b) Erosion and Sediment Control Guideline for Urban Construction (2019), as amended from time to time, prepared by the Toronto Region Conservation Authority; or
 - c) CSA W208 Erosion and Sediment Control Installation and Maintenance, as amended from time to time.
- 3.9 The Owner shall ensure that records of inspections required by this Approval during any construction activity, including those required under condition 3.8:
- 3.9.1 Include the name of the inspector, date of inspection, visual observations, and the remedial measures, if any, undertaken to maintain the temporary ESC measures.
- 3.9.2 Be retained with records relating to the Alteration that the construction relates to, such as the form required in conditions 4.3.1, 5.4.1, 6.9.1, or 7.6.1 of Schedule D, or the Schedule C Notice.

- 3.9.3 Be retrievable and made available to the Ministry upon request.
- 3.10 The document(s) or file(s) referenced in Table B1 of Schedule B of this Approval shall:
- 3.10.1 Be retained by the Owner;
- 3.10.2 Include at a minimum:
- a) Identification of the type of Sewers in the Municipal Sewage Collection System (e.g., Separate Sewer; Combined Sewer; Partially Separated Sewer; Nominally Separate Sewer) including:
 - i Location of Sewers relative to street names or easements;
 - ii Sewer and/or forcemain diameters;
 - iii Identification of pumping stations and storage structures, including asset IDs;
 - iv Identification of SSO and/or CSO locations, including asset IDs;
 - v Identification of small-bore systems, if any; and
 - vi Identification of any source protection Vulnerable Areas.
- 3.10.3 Be updated to include:
- a) Alterations authorized under Schedule D of this Approval or through a Schedule C Notice within twelve (12) months of the Alteration being placed into service.
 - b) Updates to information contained in the document(s) or files(s) not associated with an Alteration within twelve (12) months of becoming aware of the updated information.
- 3.11 An Alteration is not authorized under Schedule D of this Approval for projects that impact Indigenous treaty rights or asserted rights where:
- 3.11.1 The project is on Crown land or would alter access to Crown land;
- 3.11.2 The project is in an open or forested area where hunting, trapping or plant gathering occur;

- 3.11.3 The project involves the clearing of forested land unless the clearing has been authorized by relevant municipal, provincial, or federal authorities, where applicable;
 - 3.11.4 The project alters access to a water body;
 - 3.11.5 The proponent is aware of any concerns from Indigenous communities about the proposed project and these concerns have not been resolved; or
 - 3.11.6 Conditions respecting Indigenous consultation in relation to the project were placed in another permit or approval and have not been met.
- 3.12 No less than 60 days prior to construction associated with an Alteration the Director may notify the Owner in writing that a project is not authorized through Schedule D of this Approval where:
- 3.12.1 Concerns regarding treaty rights or asserted rights have been raised by one or more Indigenous communities that may be impacted by the Alteration; or
 - 3.12.2 The Director believes that it is in the public interest due to site specific, system specific, or project specific considerations.
- 3.13 Where an Alteration is not authorized under condition 3.11 or 3.12 above:
- 3.13.1 An application respecting the Alteration shall be submitted to the Ministry; and,
 - 3.13.2 The Alteration shall not proceed unless:
 - a) Approval for the Alteration is granted by the Ministry (i.e., a Schedule C Notice); or,
 - b) The Director provides written notice that the Alteration may proceed in accordance with conditions in Schedule D of this Approval.

4.0 Authorizations of Future Alterations for Separate Sewers, Nominally Separate Sewers and Forcemains - Additions, Modifications, Replacements and Extensions

- 4.1 The Owner or a Prescribed Person may alter the Authorized System by adding, modifying, replacing, or extending a Separate Sewer, Nominally Separate Sewer or forcemain within the Authorized System subject to the following conditions and condition 4.2 below:

- 4.1.1 The design of the addition, modification, replacement, or extension:
- a) Has been prepared by a Licensed Engineering Practitioner;
 - b) Has been designed only to collect and transmit Sewage and has not been designed to treat Sewage;
 - c) Satisfies the Design Criteria or any municipal criteria that have been established that exceed the minimum requirements set out in the Design Criteria;
 - d) Is consistent with or otherwise addresses the design objectives contained within the Design Guidelines for Sewage Works; and
 - e) Includes design considerations to protect sources of drinking water, including those set out in the Standard Operating Policy for Sewage Works, and any applicable local Source Protection Plan policies.
- 4.1.2 The addition, modification, replacement, or extension shall be designed so that it will:
- a) Not cause overflows or backups nor increase surcharging at any maintenance holes or privately owned infrastructure (e.g., service connections to basements) connected to the Authorized System or any Municipal Sewage Collection System connected to it;
 - b) Provide smooth flow transition to existing gravity Sewers; and
 - c) Not increase the generation of sulfides and other odorous compounds in the Municipal Sewage Collection System.
- 4.1.3 The maximum discharge/generation of Sewage by users who will be served by the addition, modification, replacement, or extension will not result in:
- a) An exceedance of the Authorized System hydraulic capacity, STP Uncommitted Reserve Hydraulic Capacity, or the downstream Pumping Station Capacity as specified in this Approval;
 - b) Adverse Effects;
 - c) Any increase in Collection System Overflows that is not offset by measures; or

- d) Any increase in the frequency or volume of STP Bypasses or STP Overflows that is not offset by measures.
- 4.1.4 The addition, modification, replacement, or extension is wholly located within the municipal boundary over which the Owner has jurisdiction or there is a written agreement in place with the adjacent municipality respecting the Alteration and resulting Sewage Works.
- 4.1.5 The Owner consents in writing to the addition, modification, replacement, or extension.
- 4.1.6 A Licensed Engineering Practitioner has verified in writing that the addition, modification, replacement, or extension meets the requirements of conditions 4.1.1 a) to d).
- 4.1.7 The Owner has verified in writing that the addition, modification, replacement, or extension has complied with inspection and testing requirements in the Design Criteria.
- 4.1.8 The Owner has verified in writing that the addition, modification, replacement, or extension meets the requirements of conditions 4.1.1 e) and 4.1.2 to 4.1.6.
- 4.2 The Owner or a Prescribed Person is not authorized to undertake an Alteration described above in condition 4.1 where the Alteration relates to the addition, modification, replacement or extension of a Separate Sewer, Nominally Separate Sewer, or forcemain that:
 - 4.2.1 Passes under or through a body of surface water unless trenchless construction methods are used, or the local Conservation Authority has authorized an alternative construction method.
 - 4.2.2 Has a nominal diameter greater than 750 mm for a Separate Sewer or Nominally Separate Sewer.
 - 4.2.3 Has a nominal diameter greater than 350 mm for a forcemain.
 - 4.2.4 Is a Combined Sewer or Partially Separated Sewer.
 - 4.2.5 Connects to another Municipal Sewage Collection System, unless:
 - a) Prior to construction, the Owner of the Authorized System obtains written consent from the Owner or Owner's delegate of the Municipal Sewage Collection System being connected to; and
 - b) The Owner of the Authorized System retains a copy of the written consent from the Owner or Owner's delegate of the

Municipal Sewage Collection System being connected to as part of the record that is recorded and retained under condition 4.3.

- 4.2.6 Creates a new discharge point to the Natural Environment.
- 4.2.7 Is part of an Undertaking in respect of which:
 - a) A request under s.16(6) of the EAA has been made, namely a request that the Minister make an order under s.16;
 - b) The Minister has made an order under s.16; or
 - c) The Director under that EAA has given notice under s.16.1 (2) that the Minister is considering making an order under s.16.
- 4.3 The consents and verifications required in conditions 4.1 and 4.2, if applicable, shall be:
 - 4.3.1 Recorded on Form SS1 prior to the Separate Sewer, Nominally Separate Sewer or forcemain addition, modification, replacement, or extension being placed into service; and
 - 4.3.2 Retained for a period of at least ten (10) years by the Owner.
- 4.4 For greater certainty, the verification requirements set out in condition 4.3 do not apply to any Alteration in respect of the Authorized System which:
 - 4.4.1 Is exempt under section 53(6) of the OWRA or by O. Reg. 525/98; or
 - 4.4.2 Constitutes maintenance or repair of the Authorized System.

5.0 Authorizations of Future Alterations for Combined Sewers, Partially Separated Sewers and Combined Sewage Storage Tanks and Storage Structures

- 5.1 Subject to conditions 5.2 and 5.3, the Owner or a Prescribed Person may alter the Combined Sewers, Partially Separated Sewers and combined Sewage storage tanks and storage structures in the Authorized System by:
 - 5.1.1 Modifying or replacing Combined Sewers, Partially Separated Sewers, overflow Regulators and/or outfalls if the purpose of the project is to restore the Sewage Works to good condition.
 - 5.1.2 Replacing Combined Sewers with Separate Sewers for Stormwater and sanitary Sewage.

- 5.1.3 Modifying or replacing Combined Sewers, Partially Separated Sewers, overflow regulators, outfalls, or combined Sewage storage tanks, provided that:
- a) The Alteration is designed in such a manner that will contribute to the ultimate attainment of the capture and treatment for an Average Year of all the Dry Weather Flow plus a minimum of 90% of the volume resulting from Wet Weather Flow that is above Dry Weather Flow;
 - b) The volume control criterion described in 5.1.3 a) is applied:
 - i For a consecutive seven (7) month period commencing within fifteen (15) calendar days of April 1; and
 - ii To the flows collected by the Authorized System immediately above each Collection System Overflow location unless it can be shown through modelling that the criterion is being achieved on a system-wide basis.
 - c) The Alteration is designed in a manner that will not increase CSO volumes above existing levels at each outfall except where the increase is due to the elimination of upstream CSO outfalls as part of the Alteration; and
 - d) During the remainder of the year following the seven (7) month period described in condition 5.1.3 b) above, at least the same storage and treatment capacity are maintained for treating Wet Weather Flow.
- 5.1.4 Adding oversized pipes provided they are designed to alleviate local / neighbourhood basement flooding and the Alteration satisfies condition 5.1.3 a), b), c), and d).
- 5.2 Any Alteration to the Authorized System authorized under condition 5.1 is subject to the following conditions:
- 5.2.1 The design of the Alteration shall:
- a) Be prepared by a Licensed Engineering Practitioner;
 - b) Be designed only to collect and transmit Sewage and shall not be designed to treat Sewage;
 - c) Satisfy the Design Criteria or any municipal criteria that have been established that exceed the minimum requirements set out in the Design Criteria;

- d) Be consistent with or otherwise address the design objectives contained within the Design Guidelines for Sewage Works; and
- e) Include design considerations to protect sources of drinking water, including those set out in the Standard Operating Policy for Sewage Works and any applicable local Source Protection Plan policies.

5.2.2 The design of the Alteration shall be:

- a) Undertaken in accordance with a Pollution Prevention and Control Plan; or
- b) If no Pollution Prevention and Control Plan is available, undertaken in accordance with an interim detailed plan for the local sewershed that:
 - i Describes the location, frequency, and volume of the CSOs, as well as the concentrations and mass pollutant loadings resulting from CSOs from the study area.
 - ii Includes the following minimum information:
 1. Location and physical description of CSO outfalls in the Authorized System, Collection System Overflows at pumping stations in Emergency Situations, STP Bypass and STP overflows locations;
 2. Location and identification of receiving water bodies, including sensitive receivers, for all Combined Sewer outfalls;
 3. Authorized System flow and STP treatment component capacities, present and future expected peak flow rates during dry weather and wet weather;
 4. Capacity of all regulators; and
 5. Location of cross connections between Sewage and Stormwater infrastructure.
 - iii Is intended to reduce the overall CSO volume, frequency, duration, or by-pass of treatment in the Authorized and/or municipal STP; and

- iv If there is a temporary Storm Sewer connection to a combined system as part of a Combined Sewer separation project, the construction plan includes a timeline to disconnect the Storm Sewer to a separated storm outlet.

5.2.3 The Alteration shall not result in:

- a) An exceedance of hydraulic capacity of the Authorized System, STP Uncommitted Reserve Hydraulic Capacity, or the Pumping Station Capacity as specified in this Approval;
- b) Adverse Effects;
- c) Any increase in Collection System Overflows that is not offset by measures elsewhere in the Authorized System; or
- d) Any increase in the frequency and/or volume of STP Bypasses or STP Overflows that is not offset by measures.

5.2.4 Where replacement of pipes to achieve Combined Sewer separation has been authorized under conditions 5.1.2 or 5.1.3, the following conditions apply:

- a) Stormwater quantity, quality and water balance control shall be provided such that Combined Sewer separation shall not result in an overall increase in pollutants discharged to the Natural Environment;
- b) Any new Storm Sewers that result from the Combined Sewer separation can be constructed but not operated until the proposed Stormwater Management Facilities designed to satisfy condition 5.2.4 a) are in operation; and
- c) Where any temporary structures have been installed to facilitate Combined Sewer separation, the Owner shall ensure that immediately upon Completion of the Combined Sewer separation, the temporary structure connection shall be disconnected and decommissioned.

5.2.5 The Alteration shall:

- a) Not cause overflows or backups nor increase surcharging at any maintenance holes or privately owned infrastructure (e.g., service connections to basements) connected to the Authorized System or any Municipal Sewage Collection System connected to it;

- b) Provide smooth flow transition to existing gravity sewers; and
 - c) Not increase the generation of sulfides and other odorous compounds in the Authorized System.
- 5.2.6 The Alteration is wholly located within the municipal boundary over which the Owner has jurisdiction or there is a written agreement in place with the adjacent municipality respecting the Alteration and resulting Sewage Works.
- 5.2.7 The Owner consents in writing to the Alteration authorized under condition 5.1.
- 5.2.8 A Licensed Engineering Practitioner has verified in writing that the Alteration authorized under condition 5.1 meets the design requirements of conditions 5.2.1 a) to d) and to 5.2.2.
- 5.2.9 The Owner has verified in writing that the Alteration authorized under condition 5.1 has complied with inspection and testing requirements in the Design Criteria.
- 5.2.10 The Owner has verified in writing that the Alteration authorized under condition 5.1 meets the requirements of conditions 5.2.1 e) and 5.2.3 to 5.2.8.
- 5.3 The authorization in condition 5.1 does not apply:
- 5.3.1 To the modification or replacement of a Combined Sewer or Partially Separated Sewer that has a nominal diameter greater than 750 mm.
 - 5.3.2 To the modification or replacement of a Combined Sewer or Partially Separated Sewer that connects to another Municipal Sewage Collection System, unless:
 - a) Prior to construction, the Owner of the Authorized System seeking the connection obtains written consent from the Owner or Owner's delegate of the Municipal Sewage Collection System being connected to; and
 - b) The Owner of the Authorized System retains a copy of the written consent from the Owner or Owner's delegate of the Municipal Sewage Collection System being connected to as part of the record that is recorded and retained under condition 5.4.
 - 5.3.3 Where the Alteration would create a new discharge point to the Natural Environment.

- 5.3.4 Where the Alteration would result in the addition of a new combined Sewage storage tank in the Authorized System.
- 5.4 The consents and verifications required in conditions 5.2.7 to 5.2.10, and 5.3.2 if applicable, shall be:
- 5.4.1 Recorded on Form CS1, prior to the Combined Sewer or Partially Separated Sewer modification or replacement being placed into service; and
- 5.4.2 Retained for a period of at least ten (10) years by the Owner.
- 5.5 For greater certainty, the verification requirements set out in condition 5.4 do not apply to any Alteration in respect of the Authorized System which:
- 5.5.1 Is exempt under section 53(6) of the OWRA or by O. Reg. 525/98; or,
- 5.5.2 Constitutes maintenance or repair of the Authorized System.

6.0 Authorizations of Future Alterations to Components of the Municipal Sewage Collection System

- 6.1 The Owner or a Prescribed Person may make the following Alterations to the Authorized System subject to conditions 6.4 through 6.7:
- 6.1.1 Adding, modifying, or replacing the following components of Sewage pumping stations, Separate Sewers, or Nominally Separate Sewers:
- a) In-line and/or off-line storage to manage peak flow / inflow and infiltration that does not require pumping;
 - b) Off-line storage to manage peak flow / inflow and infiltration that only requires electricity to empty the structure;
 - c) Any associated Equipment for cleaning; and
 - d) All Appurtenances associated with in-line or off-line storage facilities, including odour, and corrosion control.
- 6.1.2 Modifying existing Sewage pumping stations and odour control units / Facilities, including adding, replacing, or modifying the following components:
- a) Pumps, including replacement parts, in an existing pumping system;
 - b) Grinders and screens;

- c) Aeration and/or mixing Equipment;
- d) Chemicals and associated Equipment and tanks (including secondary containment);
- e) Odour and corrosion control structures;
- f) Instrumentation and controls;
- g) Discharge and process piping;
- h) Valves;
- i) Wet-wells; and
- j) Fat, oil, and grease separators (FOGs).

6.1.3 Adding new Sewage pumping stations, where they:

- a) Are designed to transmit a Peak Hourly Flow of no greater than 30 L/s;
- b) Include emergency stand-by power, Spill containment, and emergency alarms (SCADA, if applicable);
- c) Include emergency storage designed to provide at minimum two (2) hours of response time at peak design flow;
- d) Include odour and corrosion control, as applicable;
- e) Would serve a new residential development (or new phased residential development), which may include existing residential development that has no Combined or Partially Separated Sewers;
- f) Are designed to only collect sanitary Sewage and not Stormwater; and
- g) Do not include an emergency sanitary overflow or piping to a municipal Stormwater management system or a natural receiver to prevent the discharge to the Natural Environment.

6.1.4 Adding, modifying, or replacing Equipment associated with Real-time Control Systems, where:

- a) The Equipment is designed and implemented as part of the Owner's CSO reduction strategy or to optimize use of Sewage Works comprising the Authorized System;

- b) The Real-Time Control System is designed and integrated with fail-safe procedures such that they are automatically activated when the requirements of the current mode of operation cannot be met;
 - c) Risk management procedures are in place or will be in place prior to use of the Real-time Control System; and
 - d) Station alarms to control center are in place or will be in place prior to use of the Real-time Control System.
- 6.1.5 Adding, modifying, replacing, or removing chemical storage tanks (including fuel storage tanks) with Spill containment and associated Equipment.
- 6.1.6 Adding, modifying, replacing, or removing Motor Control Centre (MCC) and/or associated electrical.
- 6.2 The Owner or a Prescribed Person may alter the Authorized System by adding, modifying, replacing, or removing the following components subject to conditions 6.4 through 6.7:
- 6.2.1 Valves and their associated controls installed for maintenance purposes;
 - 6.2.2 Instrumentation for monitoring and controls, including SCADA systems, and hardware associated with these monitoring devices;
 - 6.2.3 Spill containment works for chemicals used within the Authorized System;
 - 6.2.4 Chemical metering pumps and chemical handling pumps;
 - 6.2.5 Measuring and monitoring devices that are not required by regulation, by a condition in this Approval, or by a condition otherwise imposed by the Ministry;
 - 6.2.6 Process piping within a Sewage pumping station, storage tank, or other structures; and
 - 6.2.7 Valve chambers or maintenance holes.
- 6.3 The Owner or a Prescribed Person may alter the Authorized System by adding, modifying, or replacing the following components subject to conditions 6.4 through 6.7:

- 6.3.1 Measuring and monitoring devices that are required by regulation, by a condition in this Approval, or by a condition otherwise imposed by the Ministry.
- 6.4 The design of the Alteration shall:
- 6.4.1 Be prepared by a Licensed Engineering Practitioner, where the Alteration falls within the practice of professional engineering as defined in the *Professional Engineers Act*, R.S.O. 1990;
- 6.4.2 Be consistent with or otherwise address the design objectives contained within the Design Guidelines for Sewage Works; and
- 6.4.3 Include design considerations to protect sources of drinking water, such as those included in the Standard Operating Policy for Sewage Works, and any applicable local Source Protection Plan policies.
- 6.5 The Alteration shall:
- 6.5.1 Not cause overflows or backups nor increase surcharging at any maintenance holes or privately owned infrastructure (e.g., service connections to basements) connected to the Authorized System or any Municipal Sewage Collection System connected to it;
- 6.5.2 Provide smooth flow transition to existing gravity Sewers;
- 6.5.3 Not increase the generation of sulfides and other odourous compounds in the Authorized System; and
- 6.5.4 Be wholly located within the municipal boundary over which the Owner has jurisdiction or there is a written agreement in place with the adjacent municipality respecting the Alteration and resulting Sewage Works.
- 6.6 Any Alteration of the Authorized System made under conditions 6.1, 6.2, or 6.3 shall not result in:
- 6.6.1 Exceedance of hydraulic capacity (including Uncommitted Reserve Hydraulic Capacity, as applicable) of the downstream:
- a) Municipal Sewage Collection System; or
- b) Receiving STPs.
- 6.6.2 Exceedance of any downstream Pumping Station Capacity as specified in Schedule B of this Approval.

- 6.6.3 An increase in the capacity of an existing Pumping Station Capacity of greater than 30%.
- 6.6.4 Any increase in Collection System Overflows that is not offset by measures taken elsewhere in the Authorized System.
- 6.6.5 Any increase in the frequency and/or volume of STP Bypasses or STP Overflows that is not offset by measures.
- 6.6.6 Deterioration of the normal operation of municipal STPs and/or the Authorized System.
- 6.6.7 A negative impact on the ability to undertake monitoring necessary for the operation of the Authorized System.
- 6.6.8 Adverse Effects.
- 6.7 The Alteration is subject to the following conditions:
 - 6.7.1 The Owner consents in writing to the Alteration.
 - 6.7.2 The person responsible for the design has verified in writing that the Alteration meets the requirements of conditions 6.4.1 and 6.4.2, as applicable.
 - 6.7.3 The Owner has verified in writing that the Alteration meets the requirements of conditions 6.4.3, 6.7.1, and 6.7.2.
- 6.8 The Owner shall verify in writing that any Alteration of the Authorized System in accordance with conditions 6.1 or 6.2 has met the requirements of the conditions listed in conditions 6.5 and 6.6.
- 6.9 The consents, verifications and documentation required in conditions 6.7 and 6.8 shall be:
 - 6.9.1 Recorded on Form SS2 prior to undertaking the Alteration; and
 - 6.9.2 Retained for a period of at least ten (10) years by the Owner.
- 6.10 For greater certainty, the verification requirements set out in condition 6.9 do not apply to any Alteration in respect of the Authorized System which:
 - 6.10.1 Is exempt under section 53(6) of the OWRA or by O. Reg. 525/98; or
 - 6.10.2 Constitutes maintenance or repair of the Authorized System, including changes to software for an existing SCADA system resulting from Alterations authorized in condition 6.2.

- 6.11 The Owner shall update, within twelve (12) months of the Alteration of the Sewage Works being placed into service, any drawings maintained for the Municipal Sewage Collection System to reflect the Alterations of the Sewage Works, where applicable.

7.0 Authorizations of Future Alterations to Equipment with Emissions to the Air

- 7.1 The Owner and a Prescribed Person may alter the Authorized System by adding, modifying, or replacing the following Equipment in the Municipal Sewage Collection System:
- 7.1.1 Venting for odour control using solid scavenging or carbon adsorption units;
 - 7.1.2 Venting for odour control by replacing existing biofiltration or wet air scrubbing systems, including any components, with Equipment of the same or better performance characteristics; and
 - 7.1.3 Emergency generators that fire No. 2 fuel oil (diesel fuel) with a sulphur content of 0.5 per cent or less measured by weight, natural gas, propane, gasoline, or biofuel, and that are used for emergency duty only with periodic testing.
- 7.2 Any Alteration of the Municipal Sewage Collection System made under condition 7.1 that may discharge or alter the rate or manner of a discharge of a Compound of Concern to the atmosphere is subject to the following conditions:
- 7.2.1 The Owner shall, at all times, take all reasonable measures to minimize odorous emissions and odour impacts from all potential sources at the Facility.
 - 7.2.2 The Owner shall ensure that the noise emissions from the Facility comply with the limits set out in Publication NPC-300.
 - 7.2.3 The Owner shall ensure that the vibration emissions from the Facility comply with the limits set out in Publication NPC-207.
- 7.3 The Owner shall not add, modify, or replace Equipment in the Municipal Sewage Collection System as set out in condition 7.1 unless the Equipment performs an activity that is directly related to municipal Sewage collection and transmission.
- 7.4 The emergency generators identified in condition 7.1.3 shall not be used for non-emergency purposes (excluding generator testing) including the generation of electricity for sale or for peak shaving purposes.

- 7.5 The Owner shall verify in writing that any addition, modification, or replacement of Equipment in accordance with condition 7.1 has met the requirements of the conditions listed in conditions 7.2, 7.3, and 7.4.
- 7.6 The verifications and documentation required in condition 7.5 shall be:
- 7.6.1 Recorded on Form A1 prior to the additional, modified or replacement Equipment being placed into service; and
- 7.6.2 Retained for a period of at least ten (10) years by the Owner.
- 7.7 For greater certainty, the verification and documentation requirements set out in condition 7.5 and 7.6 do not apply to any addition, modification, or replacement in respect of the Authorized System which:
- 7.7.1 Is exempt from the requirements of the EPA, or for Equipment that is exempt from s.9 of the EPA under O. Reg. 524/98; or
- 7.7.2 Constitutes maintenance or repair of the Authorized System.

8.0 Previously Approved Sewage Works

- 8.1 If approval for an Alteration to the Authorized System was issued under the EPA and is revoked by this Approval, the Owner may make the Alteration in accordance with:
- 8.1.1 The terms of this Approval; or
- 8.1.2 The terms and conditions of the revoked approval that were applicable as of the date this approval was issued, provided that the Alteration is commenced within five (5) years of the date that the revoked approval was issued.

9.0 Transition

- 9.1 An Alteration of the Authorized System is exempt from the requirements in clause (c) of condition 4.1.1 and clause (c) of condition 5.2.1 where:
- 9.1.1 Effort to undertake the Alteration, such as tendering or commencement of construction of the Sewage Works associated with the Alteration, begins on or before April 18, 2024.
- 9.1.2 The design of the Alteration conforms to the Design Guidelines for Sewage Works;
- 9.1.3 The design of the Alteration was completed on or before the issue date of this Approval or a Class Environmental Assessment was

completed for the Alteration and changes to the design result in significant cost increase or significant project delays; and

9.1.4 The Alteration would be otherwise authorized under this Approval.

Schedule E: Operating Conditions

System Owner	Merrickville-Wolford, The Corporation of the Village of
ECA Number	264-W601
System Name	Merrickville-Wolford Sewage Collection System
ECA Issue Date	May 16th, 2023

1.0 General Operations

- 1.1 The Owner shall ensure that, at all times, the Sewage Works comprising the Authorized System and the related Equipment and Appurtenances used to achieve compliance with this Approval are properly operated and maintained.
- 1.2 Prescribed Persons and Operating Authorities shall ensure that, at all times, the Sewage Works under their care and control and the related Equipment and Appurtenances used to achieve compliance with this Approval are properly operated and maintained.
- 1.3 In conditions 1.1 and 1.2 “properly operated and maintained” includes effective performance, adequate funding, adequate operator staffing and training, including training in applicable procedures and other requirements of this Approval and the EPA, OWRA, CWA, and regulations, adequate laboratory services, process controls and alarms and the use of process chemicals and other substances used in the Authorized System.

2.0 Duties of Owners and Operating Authorities

- 2.1 The Owner, Prescribed Persons and any Operating Authority shall ensure the following:
 - 2.1.1 At all times that the Sewage Works within the Authorized System are in service the Sewage Works are:
 - a) Operated in accordance with the requirements under the EPA and OWRA, and
 - b) Maintained in a state of good repair.
 - 2.1.2 The Authorized System is operated by persons having the training or expertise for their operating functions that is required by O. Reg. 129/04 (Licensing of Sewage Works Operators) under the OWRA and this Approval.

- 2.1.3 All sampling, testing, monitoring, and reporting requirements under the EPA and this Approval that relate to the Authorized System are complied with.
- 2.1.4 Any person who is operating the Sewage Works within the Authorized System is supervised by an operator-in-charge as described in O. Reg. 129/04 under the OWRA.
- 2.2 For clarity, the requirements outlined in the above conditions 2.1.1 through 2.1.4 for Prescribed Persons and any Operating Authority only apply to Sewage Works within the Authorized System where they are responsible for the operation.
- 2.3 The Owner, Prescribed Persons and Operating Authority shall take all reasonable steps to minimize and ameliorate any Adverse Effect on the Natural Environment or impairment of the quality of water of any waters resulting from the operation of the Authorized System, including such accelerated or additional monitoring as may be necessary to determine the nature and extent of the effect or impairment.

3.0 Operations and Maintenance

3.1 Inspection

- 3.1.1 The Owner shall ensure that all Sewage Works within the Authorized System are inspected at the frequency and in accordance with procedures set out in their O&M Manual.
- 3.1.2 The Owner shall ensure that:
- a) Any pumping stations, combined Sewage storage tanks, and any Collection System Overflow within the Authorized System as of the date of issuance of this Approval are inspected at least once per calendar year starting the year after the O&M Manual is required to be prepared and implemented as per condition 3.2.1 in Schedule E of this Approval, and more frequently if required by the O&M Manual; and
 - b) Any pumping stations, combined Sewage storage tanks, and any Collection System Overflow established or replaced within the Authorized System after the date of issuance of this Approval are inspected within one year of being placed into service and thereafter once per calendar year and more frequently if required by the O&M Manual.
- 3.1.3 The inspection of the combined Sewage storage tanks required in condition 3.1.2 shall include physical inspection at the Point of

Entry, including looking for signs of unplanned discharges from Wet Weather Flow and Dry Weather Flow.

3.1.4 The Owner shall clean and maintain Sewage Works within the Authorized System to ensure the Sewage Works perform as designed.

3.1.5 The Owner shall maintain records of the results of the inspections required in condition 3.1.1, 3.1.2, and 3.1.3, monitoring (if applicable) and any cleaning and maintenance operations undertaken, and shall make available the records for inspection by the Ministry upon request. The records shall include the following:

- a) Asset ID and name of the Sewage Works;
- b) Date and results of each inspection, maintenance, or cleaning; and
- c) Name of person who conducted the inspection, maintenance, or the name of the inspecting official, where applicable.

3.2 Operations & Maintenance (O&M) Manual

3.2.1 The Owner shall prepare and implement an operations and maintenance manual for Sewage Works within the Authorized System on or before October 18, 2024, that includes or references, but is not necessarily limited to, the following information:

- a) Procedures for the routine operation of the Sewage Works;
- b) Inspection programs, including the frequency of inspection, and the methods or tests employed to detect when maintenance is necessary;
- c) Maintenance and repair programs, including:
 - i The frequency of maintenance and repair for the Sewage Works.
 - ii Clean out requirements for any storage or overflow tanks, if applicable.
- d) Operational and maintenance requirements to protect sources of drinking water, such as those included in the Standard Operating Policy for Sewage Works, and any applicable local Source Protection Plan policies;

- e) Procedures for routine physical inspection and checks of controlling systems (e.g., SCADA) to ensure the mechanical integrity of Equipment and its accuracy on the controlling system.
 - f) Procedures for preventing odours and odour impacts;
 - g) Procedures for calibration of monitoring Equipment (e.g., flow, level, pressure);
 - h) Emergency Response, Spill Reporting and Contingency Plans and Procedures for dealing with Equipment breakdowns, potential Spills and any other abnormal situations, including notification to the SAC, the Medical Officer of Health, and the District Manager, as applicable;
 - i) Procedures for receiving, responding and recording public complaints, including recording any follow-up actions taken; and
 - j) As-built drawings or record drawings of the Sewage Works for Sewage Works constructed on or after January 1, 2010 and where available for Sewage Works constructed before January 1, 2010.
- 3.2.2 The Owner shall review and update the O&M Manual and ensure that operating staff have access, as per O. Reg 129/04 (Licensing of Sewage Works Operators) under the OWRA. Upon request, the Owner shall make the O&M Manual available to Ministry staff.
- 3.2.3 The Owner shall revise the O&M Manual to include procedures necessary for the operation and maintenance of any Sewage Works within the Authorized System that are established, altered, extended, replaced, or enlarged after the date of issuance of this approval prior to placing into service those Sewage Works.
- 3.2.4 For greater certainty, the O&M Manual may be a single document or a collection of documents that, when considered together, apply to all parts of the Authorized System.
- 3.3 Collection System Overflows
- 3.3.1 Any CSO at a point listed in Table B4 of Schedule B is considered a Class 1 approved discharge type Spill under O.Reg.675/98:
- a) Where the CSO is as a result of wet weather events when the designed capacity of the Authorized System is exceeded;

- b) Where the CSO is a direct and unavoidable result of a planned repair and/or maintenance procedure, the Owner has notified the Local Ministry Office fifteen at least (15) calendar days prior to the CSO and the Local Ministry Office has provided written consent of the CSO; or
- c) Where the CSO is planned for research or training purposes, the Owner has notified the Local Ministry Office fifteen at least (15) calendar days prior to the CSO and the Local Ministry Office has provided written consent of the CSO.

3.3.2 Any SSO at a point listed in Table B5 of Schedule B is considered a Class 1 approved discharge type Spill under O.Reg. 675/98:

- a) Where the SSO is a direct and unavoidable result of a planned repair or maintenance procedure and the Owner has notified the Local Ministry Office at least fifteen (15) calendar days prior to the SSO and the Director for the purposes of s.4 of O. Reg. 675/98 under the EPA has provided written consent of the SSO; or
- b) Where the SSO is planned for research or training purposes, the Owner has notified the Local Ministry Office at least fifteen (15) calendar days prior to the SSO and the Director for the purposes of s.4 of O. Reg. 675/98 under the EPA has provided written consent of the SSO.

3.3.3 On or before October 18, 2026, the Owner shall establish signage to notify the public, at the nearest publicly accessible point(s) downstream of any CSO outfall location identified in Schedule B, Table B4, and any SSO when the overflow is piped to a specified outlet point. If the nearest publicly accessible point is more than 100m away, then signage shall be established at the CSO or SSO outfall location. The signage shall include the following minimum information:

- a) Type of Collection System Overflow;
- b) Identification of potential hazards and limitations of water use, as applicable;
- c) ECA number and/or asset ID; and
- d) The Owner's contact information.

3.4 Monitoring

- 3.4.1 For a Collection System Overflow that occurs at a designated location, the following conditions apply:
- a) For CSO storage tanks/facilities listed in Table B3, the Owner shall:
 - i intentionally deleted to preserve numbering.
 - ii On or before October 18, 2023 or within six (6) months of the date of the publication of the Ministry's monitoring guidance, whichever is later, collect a composite sample of the combined Sewage from the CSO tank whenever the tank(s) is(are) in operation. If there is more than one tank, the tank nearest to the discharge point shall be sampled. The composite sample shall consist, at a minimum, of one sample at the beginning of the Event, and one sample at approximately every 8-hours until the end of the Event. The composite sample shall be analyzed, at a minimum, for Biochemical Oxygen Demand (BOD) (or Chemical Oxygen Demand (COD) if agreed upon by the District Manager), total suspended solids, total phosphorus and total Kjeldahl nitrogen. If the CSO continues for more than one day, multiple composite samples are allowed.
 - iii If 3.4.1 a) ii) cannot be achieved, then surrogate sampling may be used to determine the contamination concentrations of the discharge CSO tank overflow, at a minimum, for BOD (or COD), total suspended solids, total phosphorus and total Kjeldahl nitrogen. The methodology in determining, applying, and analyzing surrogate sampling shall be proposed by the Owner and subject to the written approval of the District Manager.
 - b) For CSO regulator structures listed in Table B2, and for any CSO or SSO locations listed under Table B4 or Table B5, the Owner shall:
 - i intentionally deleted to preserve numbering.
 - ii On or before October 18, 2023 or within six (6) months of the date of publication of the Ministry's monitoring guidance, whichever is later, take at least one (1) grab sample, for BOD (or COD, if agreed upon by the District Manager), total suspended solids, total phosphorus, total Kjeldahl nitrogen, and E. Coli, or

- iii On or before October 18, 2023 or within six (6) months of the date of publication of the Ministry's monitoring guidance, whichever is later, use surrogate sampling to determine the Contaminant concentrations of the discharged Collection System Overflow, at a minimum, for BOD (or COD), total suspended solids, total phosphorus, total Kjeldahl nitrogen, and E. Coli. The methodology in determining, applying, and analyzing surrogate sampling shall be proposed by the Owner and subject to the written approval of the District Manager.
 - c) The Owner shall use the Event discharged volume and the concentrations as determined in condition 3.4.1 to calculate the loading to the Natural Environment for each parameter.
- 3.4.2 For any Spill of Sewage that does not meet 3.4.1 a) or b):
 - a) Where practicable, take at least one (1) grab sample, for BOD (or COD, if agreed upon by the District Manager), total suspended solids, total phosphorus, total Kjeldahl nitrogen, and E. Coli
 - b) The Owner shall use the discharged volume, where possible, and the concentrations as determined in condition 3.4.2 a) to calculate the loading to the Natural Environment for each parameter.
- 3.4.3 If COD sampling was completed, the equivalent BOD values are required to be included with the data reported to the Ministry.
- 3.4.4 The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following documents and all analysis shall be conducted by a laboratory accredited to the ISO/IEC:17025 standard or as directed by the District Manager:
 - a) Procedure F-10-1, "Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only)", as amended from time to time.
 - b) The Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater Version 2.0" (January 2016), as amended from time to time.
 - c) The publication "Standard Methods for the Examination of Water and Wastewater", as amended from time to time.

4.0 Reporting

4.1 The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.

4.2 Collection System Overflows

4.2.1 If the Collection System Overflow meets the criteria listed in condition 3.3.1 or 3.3.2:

- a) The Owner shall report the Event as a Class 1 approved discharge type Spill as soon as practicable to the Ministry either by a verbal to SAC or in an electronic format if the Ministry makes a system available;
- b) The Owner shall report the Event to the local Medical Officer of Health in a manner agreed upon with the local Medical Officer of Health;
- c) The manner of notification to the Ministry shall be in two (2) stages and include, at a minimum, the following information:
 - i The Asset ID, infrastructure description as detailed in Table B5 in Schedule B, the outfall location, and the Point of Entry (as applicable), and the reason(s) for the Event.
 - ii First stage of reporting:
 - a. The date and time (start) of the Event.
 - iii Second stage of reporting (as soon as practicable and may be reported at same time as first stage):
 - a. The date, duration, and time (start and end) of the Event;
 - b. The estimated or measured volume of the Event, accurate to at least +/- 20% of the volume;
 - i. If the volume of the Event is not readily available at the time of the second stage of reporting, the estimated volume can be provided to the Ministry within seven (7) calendar days of the second stage of reporting;

- c. If any, summary of complaints, observed adverse impacts, any additional sampling obtained, disinfection, and any corrective measures taken;
- d) Upon request of the local office, the Owner shall within fifteen (15) calendar days of the occurrence of any Collection System Overflow, the Owner shall submit a full written report of the occurrence to the District Manager describing the cause and discovery of the Collection System Overflow, clean-up and recovery measures taken, preventative measures to be taken and schedule of implementation, or an alternate report as agreed to in writing by the District Manager.

4.3 Spills

4.3.1 If the Collection System Overflow does not meet the criteria listed in condition 3.3.1 or 3.3.2, or is otherwise considered a Spill of Sewage:

- a) The Owner shall report the Spill to SAC pursuant to O.Reg.675/98 and Part X of the EPA;
- b) The Owner shall report the Event to the local Medical Officer of Health in a manner agreed upon with the local Medical Officer of Health;
- c) In addition to the obligations under Part X of the Environmental Protection Act, the Owner shall, within fifteen (15) calendar days of the occurrence of any reportable Spill, submit a full written report of the occurrence to the District Manager describing the cause and discovery of the spill or loss, actual/estimated volume of the Spill, clean-up and recovery measures taken, preventative measures to be taken and schedule of implementation.

4.4 If the Owner is unable to determine the volume of a Collection System Overflow for the purpose of reporting, the Owner shall develop procedures that enable estimated or measured volumes to be included in the required reporting for any Collection System Overflow occurring on or after April 18, 2024.

4.5 The Owner shall follow the direction of the Ministry and the local Medical Officer of Health regarding any Collection System Overflows.

4.6 The Owner shall prepare an annual performance report for the Authorized System that:

- 4.6.1 Is submitted to the Director on or before March 31st of each year and covers the period from January 1st to December 31st of the preceding calendar year.
- a) For clarity, the first report shall cover the period of January 1st, 2023 to December 31st, 2023 and be submitted to the Director on or before March 31st, 2024.
 - b) For the transitional period of January 1, 2022 to December 31, 2022, annual reporting requirements from previous ECAs pertaining to Spills only, where these occurred in the reporting period, and that have been revoked through issuance of this ECA shall apply.
 - i For the transitional period, condition 4.7.2 does not apply.
- 4.6.2 Is also submitted to the District Manager where a Collection System Overflow or Spill of Sewage has occurred in the reporting period.
- 4.6.3 If applicable, includes a summary of all required monitoring data along with an interpretation of the data and any conclusion drawn from the data evaluation about the need for future modifications to the Authorized System or system operations.
- 4.6.4 Includes a summary of any operating problems encountered and corrective actions taken.
- 4.6.5 Includes a summary of all calibration, maintenance, and repairs carried out on any major structure, Equipment, apparatus, mechanism, or thing forming part of the Municipal Sewage Collection System.
- 4.6.6 Includes a summary of any complaints related to the Sewage Works received during the reporting period and any steps taken to address the complaints.
- 4.6.7 Includes a summary of all Alterations to the Authorized System within the reporting period that are authorized by this Approval including a list of Alterations that pose a Significant Drinking Water Threat.
- 4.6.8 Includes a summary of all Collection System Overflow(s) and Spill(s) of Sewage, including:
- a) Dates;
 - b) Volumes and durations;

- c) If applicable, loadings for total suspended solids, BOD, total phosphorus, and total Kjeldahl nitrogen, and sampling results for E.coli;
 - d) Disinfection, if any; and
 - e) Any adverse impact(s) and any corrective actions, if applicable.
- 4.6.9 Includes a summary of efforts made to reduce Collection System Overflows, Spills, STP Overflows, and/or STP Bypasses, including the following items, as applicable:
- a) A description of projects undertaken and completed in the Authorized System that result in overall overflow reduction or elimination including expenditures and proposed projects to eliminate overflows with estimated budget forecast for the year following that for which the report is submitted.
 - b) Details of the establishment and maintenance of a PPCP, including a summary of project progresses compared to the PPCP's timelines.
 - c) An assessment of the effectiveness of each action taken.
 - d) An assessment of the ability to meet Procedure F-5-1 or Procedure F-5-5 objectives (as applicable) and if able to meet the objectives, an overview of next steps and estimated timelines to meet the objectives.
 - e) Public reporting approach including proactive efforts.
- 4.7 The report described in condition 4.6 shall be:
- 4.7.1 Made available, on request and without charge, to members of the public who are served by the Authorized System; and
 - 4.7.2 Made available, by June 1st of the same reporting year, to members of the public without charge by publishing the report on the Internet, if the Owner maintains a website on the Internet.

5.0 Record Keeping

- 5.1 The Owner shall retain for a minimum of ten (10) years from the date of their creation:
 - 5.1.1 All records, reports and information required by this Approval and related to or resulting Alterations to the Authorized System, and

5.1.2 All records, report and information related to the operation, maintenance and monitoring activities required by this Approval.

5.2 The Owner shall update, within twelve (12) months of any Alteration to the Authorized System being placed into service, any drawings maintained for the Municipal Sewage Collection System to reflect the Alteration of the Sewage Works, where applicable.

6.0 Review of this Approval

6.1 No later than the date specified in Condition 1 of Schedule A of this Approval, the Owner shall submit to the Director an application to have the Approval reviewed. The application shall, at minimum:

6.1.1 Include an updated description of the Sewage Works within the Authorized System, including any Alterations to the Sewage Works that were made since the Approval was last issued; and

6.1.2 Be submitted in the manner specified by Director and include any other information requested by the Director.

7.0 Source Water Protection

7.1 The Owner shall ensure that any Alteration in the Authorized System is designed, constructed, and operated in such a way as to be protective of sources of drinking water in Vulnerable Areas as identified in the Source Protection Plan, if available.

7.2 The Owner shall prepare a "Significant Drinking Water Threat Assessment Report for Proposed Alterations" for the Authorized System on or before October 18, 2024 that includes, but is not necessarily limited to:

7.2.1 An outline of the circumstances under which the proposed Alterations could pose a Significant Drinking Water Threat based on the Director's Technical Rules established under the CWA.

7.2.2 An outline of how the Owner assesses the proposed Alterations to identify drinking water threats under the CWA.

7.2.3 For any proposed Alteration a list of components, Equipment, or Sewage Works that are being altered and have been identified as a Significant Drinking Water Threat.

7.2.4 A summary of design considerations and other measures that have been put into place to mitigate risks resulting from construction or operation of the components, Equipment or Sewage Works identified in condition 7.2.3, such as those included in the Standard Operating Policy for Sewage Works.

- 7.3 The Owner shall make any necessary updates to the report required in condition 7.2 at least once every twelve (12) months.
- 7.4 Any components, Equipment or Sewage Works added to the report required in condition 7.2 shall be included in the report for the operational life of the Sewage Works.
- 7.5 Upon request, the Owner shall make a copy of the report required in condition 7.2 available to the Ministry or Source Protection Authority staff.

8.0 Additional Studies

Assessment of Wet Weather Flows Compared to Dry Weather Flows

8.1 This condition and the following requirements apply where:

- a) The Authorized System has no Combined Sewers or Partially Separated Sewers; and
- b) There has been one or more of: an STP Overflow, STP Bypass, or Collection System Overflow within the ten (10) year period starting January 1, 2012 and ending December 31, 2021.

The following requirements do not apply if:

- a) The Collection System Overflow is a result of emergency overflows at pumping stations during power outage or Equipment failure; and
- b) There has been no STP Overflow or STP Bypass.

8.1.1 The Owner shall conduct an assessment of Wet Weather Flows compared to the Dry Weather Flows in the Authorized System and/or to the STP(s) described in Schedule A, as per the following conditions:

- a) The assessment shall evaluate available data from the ten (10) year period starting January 1, 2012 and ending December 31, 2021.
- b) The assessment shall be completed and submitted to the Director by April 18, 2025.
- c) In the event that Wet Weather Flows in the ten (10) year period described above have created STP Bypasses or STP Overflows at the STP(s) specified in Schedule A or Collection System Overflows in an Average Year, then the study shall include:

- i Actions and timelines to meeting the Procedure F-5-1 objectives;
- ii Review of causes of STP Overflow, STP Bypass and/or Collection System Overflow Events, including inflow and infiltration, sewer use, and characteristics of rainfall events, as applicable;
- iii Inspection of the Sewers and bypass structures; and
- iv Identification of any near and/or long-term corrective actions with anticipated timelines.

Assessment of Conformance to Procedure F-5-1 and F-5-5

8.2 This condition and the following requirements apply where:

- a) The Authorized System includes Combined Sewers or Partially Separated Sewers, and
- b) The Authorized System experienced a Collection System Overflow, an STP Bypass, or STP Overflow within the ten (10) year period starting January 1, 2012 and ending December 31, 2021.

8.2.1 The Owner shall conduct an assessment to demonstrate conformance of the Authorized System to Procedure F-5-1 or Procedure F-5-5, as applicable, in accordance with the following conditions:

- a) The assessment shall:
 - i Be prepared by a Licensed Engineering Practitioner and be submitted to the Director by April 18, 2025
 - ii Be performed for each of the years 2012 through to 2021;
 - iii Include the number of Collection System Overflows as a result of storms that are not Significant Storm Events for each year;
 - iv Include the estimated length of Combined Sewers and Separate Sewers within the collection system;
 - v Include the date of the most recent PPCP;
 - vi Include the status of each action items specified in the PPCP, as applicable;

- vii Include a summary of additional action items not specified in a PPCP which have been taken to prevent Collection System Overflows in the ten (10) year period starting January 1, 2012 and ending December 31, 2021; and
 - viii Identify timelines for achieving conformance to Procedure F-5-1 or Procedure F-5-5 objectives, as applicable.
- 8.2.2 The Owner shall submit a new or updated PPCP to the Director, no later than October 18, 2028, if:
- a) No PPCP exists for the Authorized System, or
 - b) The PPCP for the Authorized System is older than ten (10) years as of May 16th, 2023.
- 8.2.3 The PPCP shall include, at minimum:
- a) Characterization of the Combined Sewer System (CSS) – Monitoring, modeling and other appropriate means shall be used to characterize the CSS and the response of the CSS to precipitation events. The characterization shall be based on the ten (10) year period starting January 1, 2012 and ending December 31, 2021 and include the determination of the location, frequency and volume of the CSOs, concentrations and mass pollutants resulting from CSOs, and identification and severity of suspected CSS deficiencies. Records shall be kept for CCS including the following:
 - i Location and physical description of CSO and SSO outfalls in the collection systems, emergency overflows at pumping stations, and bypass locations at STPs;
 - ii Location and identification of receiving water bodies, including sensitive receivers, for all Combined Sewer outfalls;
 - iii Combined Sewer system flow and STP treatment capacities, present and future (20-year timeframe) expected peak flow rates during dry weather and wet weather;
 - iv Capacity of all regulators;
 - v Location of cross connections between sanitary Sewage and Stormwater infrastructure; and

- vi Location and identification of infrastructure in the CSS where monitoring Equipment is installed.
- b) Operational procedures shall be developed including the following:
 - i Combined Sewer maintenance program; and
 - ii Regulator inspection and maintenance programs.
- c) An examination of non-structural and structural CSO control alternatives that may include:
 - i Source control;
 - ii Inflow/Infiltration reduction;
 - iii Operation and maintenance improvements;
 - iv Control structure improvements;
 - v Collection system improvements;
 - vi Storage technologies;
 - vii Treatment technologies; and
 - viii Sewer separation.
- d) An implementation plan with a schedule of all practical measures to eliminate dry weather overflows and minimize wet weather overflows, as well as an overflow percent reduction target.
 - i The implementation plan shall show how the minimum CSO prevention and control requirements and other criteria in Procedure F-5-5 are being achieved.

8.2.4 The Owner shall ensure that an updated PPCP for the Authorized System is prepared within ten (10) years of the date that the previous PPCP was finalized.

Sewer Model

8.3 The Owner shall prepare a new/updated Sewer model, within three (3) years of May 16th, 2023, if any of the following pertain to the Authorized System:

8.3.1 It includes Combined Sewers;

- 8.3.2 It services a population greater than 10,000; or
- 8.3.3 The Sewer model for the Authorized System was last updated prior to 2012 and 8.3.1 or 8.3.2 apply.

Schedule F: Residue Management

System Owner	Merrickville-Wolford, The Corporation of the Village of
ECA Number	264-W601
System Name	Merrickville-Wolford Sewage Collection System
ECA Issue Date	May 16th, 2023

1.0 Residue Management System

1.1 Not Applicable:



**AMENDED CERTIFICATE OF APPROVAL
MUNICIPAL AND PRIVATE SEWAGE WORKS**

NUMBER 1121-7YRQLF

Issue Date: January 18, 2010

The Corporation of the Village of Merrickville-Wolford
317 Brock St W
Post Office Box, No. 340
Merrickville-Wolford, Ontario
K0G 1N0

Site Location: Merrickville Sewage Treatment Plant (STP)
106 Collar Hill Rd
Merrickville-Wolford Village, United Counties of Leeds and Grenville

You have applied in accordance with Section 53 of the Ontario Water Resources Act for approval of:

Upgrading of the Merrickville Sewage Treatment Plant (NAD 83, UTM zone 18, 434,560 m Easting and 4,973,888 m Northing) for the collection, transmission, treatment and disposal of domestic sewage and septage from the Merrickville-Wolford Village, located at the above site location, rated at the capacities mentioned below and consisting of the following Works;

Merrickville STP (Rated Capacity)	
<i>Average Daily Flow</i>	800 m ³ /d
<i>Peak Flow Rate</i>	3,800 m ³ /d

PROPOSED WORKS

Headworks

- Installation of an auger fine screen (6 mm spacing) and channel grinder, screening dewatering and a bypass manual bar rack;

Septage Receiving System

- Construction of a septage receiving station having manual bar screen, flowmeter chamber, a 3.6 m x 3.6 m x 4 m deep septage holding tank and two (one duty, one standby) chopper type submersible sewage pumps each having a capacity of 4.6 L/s at a Total Dynamic Head (TDH) of 5 m to handle septage; the septage tank to receive supernatant flow from the digester;

Grit Channels

- Two (2) horizontal manually cleaned grit tanks having overall length of 7.0 m and channel width of 0.56m and equipped with velocity control proportional weir;

Secondary Treatment

Construction of a secondary treatment process employing sequencing batch reactor technology, consisting of;

Anaerobic Tanks (ISAM)

- Construction of two (2) 8.75 m x 5.5 m x 5.5 m side water depth (SWD) integrated surge anoxic mix (ISAM™) cells, complete each with a reinforced concrete cover and vent; each cell to be equipped with one (1) influent diffuser baffle

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- with flange connection to anchor to the tank wall and with one (1) overflow baffle; and
- Installation of two (2) 2.2 kW submersible waste sludge transfer pumps in the ISAMTM to pump settled waste sludge to the aerobic digester;

Anoxic Tanks

- Construction of two (2) 8.75 m × 4.0 m × 5.5 m side water depth (SWD) surge anoxic mix (SAMTM) cells, complete each with a 7.5 kW submersible pump for jet aspirating application, a 7.5 kW submersible jet pump for jet motive application, 2.2 kW submersible sludge wasting pump, one (1) electrically operated waste sludge control valve in a weather proof enclosure, one (1) ultrasonic level sensor and one (1) high water level float

Sequencing Batch Reactor (SBR)

- Construction of two (2) 8.75 m × 8.00 m × 5.5 m side water depth (SWD) SBR cells, complete each with a jet aeration system, one (1) manually operated backflush valve, two (2) stainless steel overflow weirs/scum skimmers, a fixed type decanter of stainless steel construction, one (1) electric operated decant vent valve, one (1) electric operated effluent control butterfly valve, one (1) set of ultrasonic level sensor, one (1) TSS sensor, one (1) DO sensor, one (1) dual channel analyser and one (1) control panel NEMA 4; and
- Installation of three (3) positive displacement blowers, one (1) blower for each cell and a third blower used as standby unit; each blower rated at a capacity of 110 L/s at 53 kPa and driven by a 11 kW electric motor;

Effluent Disinfection System

- Installation of one UV disinfection system, to replace existing chorine contact chamber, capable of handling a peak flow rate of 3,800 m³/d to each bank and comprising of one (1) UV channel 8.0 m long by 0.3 m wide by 0.92 m deep with two (2) UV banks operating in duty/standby type.

Chemical Storage and Feed System

- Installation of a 20,000 L fiberglass reinforced plastics (FRP) Ferric Chloride storage tank; and
- Ferric Chloride feed system consisting of two (one duty, one standby) chemical feed pumps each having a capacity of 6.2 L/hr at discharge pressure of 690 kPa.

Sanitary Pumping Station

- Construction of a sanitary pumping station consisting of two (one duty, one standby) pumps each having a capacity of 8 L/s at 11.5 m TDH to pump sanitary sewage and floor drain waste generated in the administration/process building to the head works; pumping station equipped with level float and 1500 mm diameter wet well and accessories.

Biosolids Management

Aerobic Sludge Digestion

- Construction of one (1) 118 m³ aerobic sludge digester in two cells (Stage 1 and Stage 2) at a ratio of 2:1 by volume, having the larger cell for Stage 1 and the smaller cell for Stage 2 and an aeration/mixing system using blowers;
- Installation of two (2) submersible sewage pumps operating in a duty/standby configuration rated for 12 L/s and 13 TDH to pump digested sludge from the aerobic digester to the biosolids storage tank; and
- Two (2) air blowers servicing the aerobic digester, each rated at a capacity of 45 L/s at 55 kPa;

Biosolids Storage

- One (1) biosolids storage tank (glass fused steel) with a storage capacity of 950 m³ with 240 days sludge storage capacity for seasonal storage of thickened biosolids; and
- One (1) biosolids storage tank missing/transfer pump.

Standby Power

- Installation of one (1) 200 kW prime power set.

Effluent Outfall

- Installation of one (1) 500 mm diameter outfall sewer connecting the effluent pipe from the disinfection building to the existing outfall sewer.

New Structure

- Construction of a new building, 20.5 m x 9 m, for housing blowers, storage tank mixing pump, offices, chemical room, MCC room, mechanical room, washroom, shower and change room;

Modifications to the existing Merrickville STP

- Decommissioning and demolition of the existing steel process tanks;

Miscellaneous

All associated appurtenances, piping, heating and ventilation, electrical and control systems necessary to operate the Works.

all in accordance with the following supporting documents:

1. Application for Approval of Municipal and Private Sewage Works dated September 9, 2009 with cover letter submitted by Michael Gundry, P.Eng. of AECOM Canada Ltd, Consulting Engineers, Whitby, Ontario;
2. Letter dated December 7, 2009 from Michael Gundry, P.Eng. of AECOM Canada Ltd to Youssouf Kalogo, P.Eng. of the Ontario Ministry of the Environment (MOE) along with supporting documents;
3. Notice of Filing of Addendum dated December 3, 2009;
4. Report entitled "Village of Merrickville-Wolford: Merrickville Sewage Treatment Plant Replacement Pre-design Report" dated September 2009 and prepared by AECOM Canada Ltd., File Number 112243;
5. Set of engineering drawings entitled "Village of Merrickville-Wolford: Merrickville Sewage Treatment Plant Replacement" dated August 2009 and prepared by AECOM Canada Ltd., File Number 112243
6. Report entitled "Village of Merrickville-Wolford: Sewage Treatment Plant Upgrades Environmental Study Report" dated September 2004 and prepared by TSH. Project Number 14-11898;

EXISTING WORKS

Sewage Pumping Station

Pumping Station No. 1 (to be replaced)

- located adjacent to Main Street and approximately 130 m east of Church Street consisting of two (2) submersible pump rated at 32 L/s at 28 m complete with a 25 hp, 1750 rpm motor. The pumping station consists of a 3.1 m x 3.3 m x 4.0 m depth reinforced concrete wet well. Sewage is pumped through approximately 418 m of 150 mm diameter forcemain to the sewage treatment plant. A 35 kW diesel generator is housed in a prefabricated building to provide standby power facilities during a power failure.

Pumping Station No. 2

- located in part of Instruments 11979 and 33417 Registered Plan #6 at William Merrick Drive and equipped with two submersible pumps each rated at 20 L/s at 11 m TDH with a 6 hp, 1750 rpm motor and complete with approximately 75 m of 150 mm diameter forcemain discharging to 150 mm diameter forcemain at the Rideau River; approximately 79 m of 460 mm diameter overflow pipe discharging to the Rideau River; and approximately 21 m of 380 mm diameter influent sewer.

Sewage Treatment Plant (to be replaced by the Proposed Works)

A 1.22 m high fibreglass wind-break anchored approximately 1.2 m away from the centre, around the final clarifier, the aeration tank, the chlorination tanks and the aerated sludge holding tank and to insulate, using 7.6 cm rigid fibreglass and 0.025 Aluminum cladding above grade and 7.6 cm styrofoam below grade.

all in accordance with plans details prepared by Thermec Insulation Services Ltd., at a total estimated cost, including engineering and contingencies, of Forty Thousand Dollars (\$40,000.00).

For the purpose of this Certificate of Approval and the terms and conditions specified below, the following definitions

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apply:

"*Act*" means the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, as amended;

"*Average Daily Flow*" means the cumulative total sewage flow to the sewage works during a calendar year divided by the number of days during which sewage was flowing to the sewage works that year;

"*BOD5*" (also known as TBOD5) means five day biochemical oxygen demand measured in an unfiltered sample and includes carbonaceous and nitrogenous oxygen demand;

"*By-pass*" means any discharge from the *Works* that does not undergo any treatment or only undergoes partial treatment before it is discharged to the environment;

"*CBOD5*" means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample;

"*Certificate*" means this entire certificate of approval document, issued in accordance with Section 53 of the *Act*, and includes any schedules;

"*Daily Concentration*" means the concentration of a contaminant in the effluent discharged over any single day, as measured by a composite or grab sample, whichever is required;

"*Director*" means any *Ministry* employee appointed by the Minister pursuant to section 5 of the *Act*;

"*District Manager*" means the District Manager of the Kingston District Office of the Ministry;

"*E. Coli*" refers to the thermally tolerant forms of Escherichia that can survive at 44.5 degrees Celsius;

"*Existing Works*" means those portions of the Merrickville STP previously constructed and approved under a certificate of approval;

"*Geometric Mean Density*" is the nth root of the product of multiplication of the results of n number of samples over the period specified;

"*Ministry*" means the Ontario Ministry of the Environment;

"*Monthly Average Concentration*" means the arithmetic mean of all *Daily Concentrations* of a contaminant in the effluent sampled or measured, or both, during a calendar month;

"*Monthly Average Loading*" means the value obtained by multiplying the *Monthly Average Concentration* of a contaminant by the *Monthly Average Daily Flow* over the same calendar month;

"*Owner*" means the Corporation of the Village of Merrickville-Wolford and includes its successors and assignees;

"*Peak Flow Rate*" means the maximum rate of sewage flow for which the *Works* was designed;

"*Proposed Works*" means the sewage works described in the *Owner's* application, this *Certificate* and in the supporting documentation referred to herein, to the extent approved by this *Certificate*;

"*Rated Capacity*" means the *Average Daily Flow* for which the *Works* are approved to handle;

"*Substantial Completion*" has the same meaning as "*substantial performance*" in the Construction Lien Act; and

"*Works*" means the sewage works described in the *Owner's* application, this *Certificate* and in the supporting documentation referred to herein, to the extent approved by this *Certificate* and includes both *Existing Works* and *Proposed Works*.

You are hereby notified that this approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. GENERAL PROVISIONS

- (1) The *Owner* shall ensure that any person authorized to carry out work on or operate any aspect of the *Works* is notified of this *Certificate* and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
- (2) Except as otherwise provided by these Conditions, the *Owner* shall design, build, install, operate and maintain the *Works* in accordance with the description given in this *Certificate*, the application for approval of the works and the submitted supporting documents and plans and specifications as listed in this *Certificate*.
- (3) Where there is a conflict between a provision of any submitted document referred to in this *Certificate* and the Conditions of this *Certificate*, the Conditions in this *Certificate* shall take precedence, and where there is a conflict between the listed submitted documents, the document bearing the most recent date shall prevail.
- (4) Where there is a conflict between the listed submitted documents, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.
- (5) The requirements of this *Certificate* are severable. If any requirement of this *Certificate*, or the application of any requirement of this *Certificate* to any circumstance, is held invalid or unenforceable, the application of such requirement to other circumstances and the remainder of this certificate shall not be affected thereby.

2. EXPIRY OF APPROVAL

The approval issued by this *Certificate* will cease to apply to those parts of the *Works* which have not been constructed within five (5) years of the date of this *Certificate*.

3. CHANGE OF OWNER

- (1) The *Owner* shall notify the *District Manager* and the *Director*, in writing, of any of the following changes within 30 days of the change occurring:
 - (a) change of *Owner*;
 - (b) change of address of the *Owner*;
 - (c) change of partners where the *Owner* is or at any time becomes a partnership, and a copy of the most recent declaration filed under the Business Names Act, R.S.O. 1990, c.B17 shall be included in the notification to the *District Manager*;
 - (d) change of name of the corporation where the *Owner* is or at any time becomes a corporation, and a copy of the most current information filed under the Corporations Informations Act, R.S.O. 1990, c. C39 shall be included in the notification to the *District Manager*;

- (2) In the event of any change in ownership of the *Works*, other than a change to a successor municipality, the *Owner* shall notify in writing the succeeding owner of the existence of this *Certificate*, and a copy of such notice shall be forwarded to the *District Manager* and the *Director*.

4. UPON THE SUBSTANTIAL COMPLETION OF THE WORKS

- (1) Upon the *Substantial Completion* of the *Proposed Works*, the *Owner* shall prepare a statement, certified by a Professional Engineer, that the works are constructed in accordance with this *Certificate*, and upon request, shall make the written statement available for inspection by Ministry personnel.

(2) Within one (1) year of the *Substantial Completion* of the *Proposed Works*, a set of as-built drawings showing the works "as constructed" shall be prepared. These drawings shall be kept up to date through revisions undertaken from time to time and a copy shall be retained at the *Works* for the operational life of the *Works*.

5. BY-PASSES

(1) Any *By-pass* of sewage from any portion of the *Works* is prohibited, except where:
 (a) it is necessary to avoid loss of life, personal injury, danger to public health or severe property damage;
 or

(b) the *District Manager* agrees that it is necessary for the purpose of carrying out essential maintenance and the *District Manager* has given prior written acknowledgment of the *by-pass*.

(2) The *Owner* shall collect at least one (1) grab sample of the *By-pass* and have it analyzed for the parameters outlined in Condition 7 using the protocols in Condition 9.

(3) The *Owner* shall maintain a logbook of all *By-pass* events which shall include, at a minimum, the time, location, duration, quantity of *By-pass*, the authority for *By-pass* pursuant to subsection (1), and the reasons for the occurrence.

(4) The *Owner* shall, in the event of a *By-pass* event pursuant to subsection (1), disinfect the by-passed effluent prior to it reaching the receiver such that the receiver is not negatively impacted.

6. EFFLUENT OBJECTIVES

(1) The *Owner* shall use best efforts to design, construct and operate the *Works* with the objective that the concentrations of the materials named below as effluent parameters are not exceeded in the effluent from the *Works*.

Table 1 - Effluent Objectives	
Effluent Parameter	Monthly Average Concentration (milligrams per litre unless otherwise indicated)
<i>CBOD5</i>	10.0
Total Suspended Solids	10.0
Total Phosphorus	0.3
Total Ammonia Nitrogen	3.0
- Summer (May 1 to September 30)	5.5
- Winter (October 1 to April 30)	
<i>E-Coli</i>	100 organisms/100 mL (Monthly <i>Geometric Mean Density</i>)

(2) The *Owner* shall use best efforts to:
 (a) maintain the pH of the effluent from the *Works* within the range of 6.5 to 8.5 inclusive, at all times;
 (b) operate the works within the *Rated Capacity* and the *Peak Flow Rate* of the *Works*;
 (c) ensure that the effluent from the *Works* is essentially free of floating and settleable solids and does not contain oil or any other substance in amounts sufficient to create a visible film or sheen or foam or discoloration on the receiving waters.

(3) The *Owner* shall include in all reports submitted in accordance with Conditions 10 a summary of the efforts made and results achieved under this Condition.

7. EFFLUENT LIMITS

(1) The *Owner* shall operate and maintain the *Works* such that the concentrations and waste loadings of the materials named in Table 2 as effluent parameters are not exceeded in the effluent from the *Works*.

Table 2 - Effluent Limits		
Effluent Parameter	Average Concentration (milligrams per litre unless otherwise indicated)	Waste Loading (kilograms per day unless otherwise indicated)
Column 1	Column 2	Column 3
<i>CBOD5</i>	15	12
Total Suspended Solids	15	12
Total Phosphorus	0.63	0.50
Total Ammonia Nitrogen - Summer (May 1 to September 30) - Winter (October 1 to April 30)	Non-acutely lethal	Not applicable
<i>E. Coli</i>	200 organisms per 100 millilitres	Not applicable
pH of the effluent maintained between 6.0 to 9.5, inclusive, at all times.		

- (2) For the purposes of determining compliance with and enforcing subsection (1):
- (a) The *Monthly Average Concentration* of a parameter named in Column 1 of subsection (1) shall not exceed the corresponding maximum concentration set out in Column 2 of subsection (1).
 - (b) The *Average Monthly Loading* of a parameter named in Column 1 of subsection (1) shall not exceed the corresponding maximum waste loading set out in Column 3 of subsection (1).
 - (c) The pH of the effluent shall be maintained within the limits outlined in subsection (1), at all times.
- (3) Notwithstanding subsection (1), the *Owner* shall operate and maintain the *Works* such that the *Monthly Geometric Mean Density* of *E. Coli* in the effluent does not exceed 200 organisms per 100 millilitres of effluent discharged from the *Works*.
- (4) Enforceable non-compliance limits for each calendar year from issuance of this certificate until six (6) months after *Substantial Completion* of the *Proposed Works* will include 1.0 mg/L for Total Phosphorus (*Monthly Average Concentration*), 25 mg/L for *CBOD5* (*Monthly Average Concentration*), 25 mg/L for Total Suspended Solids (*Monthly Average Concentration*), 0.5 mg/L for Total residual chlorine (*Monthly Average Concentration*) and 200 organisms per 100 millilitres (*Monthly Geometric Mean Density*). Paragraphs (a) and (b) of subsection (2) above shall apply six months after *Substantial Completion* of the *Proposed Works* approved by this *Certificate*.
- (5) Paragraph (c) of subsection (2) above shall apply upon the issuance of this *Certificate*.
- (6) If the effluent is acutely lethal to rainbow trout or *Daphnia magna*, the *Owner* must, as a minimum, carry out the following:
- (a) review the following:
 - (i) effluent quality and confirm that concentrations of un-ionized ammonia in the acutely lethal effluent is not higher than 0.1 mg/L, but corresponding to temperature condition during the bioassay and pH measured at the completion of the fish bioassay;
 - (ii) plant operations around the time of the toxicity event; and
 - (iii) all data available regarding plant operations and effluent quality.

If the observed effluent toxicity is associated with un-ionized ammonia, the *Owner* shall install and implement whatever contingency measures are necessary to achieve non-acutely lethal

effluent. If the observed effluent toxicity is not associated with un-ionized ammonia, an investigation will be undertaken to determine the cause or source of the toxicity.

(b) Upon determination of cause or source of acute lethality to rainbow trout or *Daphnia magna*, the *Owner* shall determine and implement appropriate control measures to achieve non-acutely lethal effluent and time lines for the implementation of identified control measures. The *Owner* shall submit the proposed control measures and implementation time lines for approval to the *District Manager*.

8. OPERATION AND MAINTENANCE

(1) The *Owner* shall exercise due diligence in ensuring that, at all times, the *Works* and the related equipment and appurtenances used to achieve compliance with this *Certificate* are properly operated and maintained. Proper operation and maintenance shall include effective performance, adequate funding, adequate operator staffing and training, including training in all procedures and other requirements of this *Certificate* and the *Act* and regulations, adequate laboratory facilities, process controls and alarms and the use of process chemicals and other substances used in the *Works*.

(2) The *Owner* shall prepare an operation manual that includes, but not necessarily limited to, the following information:

(a) Operating procedures for routine operation of the *Works*;

(b) Inspection programs, including frequency of inspection, for the *Works* and the methods or tests employed to detect when maintenance is necessary;

(c) Repair and maintenance programs, including the frequency of repair and maintenance for the *Works*;

(d) Procedures for the inspection and calibration of monitoring equipment;

(e) A spill prevention control and countermeasures plan, consisting of contingency plans and procedures for dealing with equipment breakdowns, potential spills and any other abnormal situations, including notification of the *District Manager*; and

(f) Procedures for receiving, responding and recording public complaints, including recording any follow up actions taken.

(3) The *Owner* shall maintain the operations manual current and retain a copy at the location of the *Works* for the operational life of the *Works*. Upon request, the *Owner* shall make the manual available to *Ministry* staff.

(4) The *Owner* shall provide for the overall operation of the *Works* with an operator who holds a licence that is applicable to that type of facility and that is of the same class as or higher than the class of the facility in accordance with Ontario Regulation 129/04.

9. MONITORING AND RECORDING

The *Owner* shall, upon commencement of operation of the *Works*, carry out the following monitoring program:

(1) All samples and measurements taken for the purposes of this *Certificate* are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.

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(2) For the purposes of this condition, weekly means once each week, thrice per week means three times every week, monthly means once every month, quarterly means every three months at minimum.

(3) Samples shall be collected at the following sampling points, at the frequency specified, by means of the specified sample type and analyzed for each parameter listed and all results recorded:

Table 3 - Raw Sewage Monitoring (Samples to be collected at the head of the inlet works)		
Parameters	Sample Type	Minimum Frequency
<i>BOD5</i>	24-hr composite	Monthly
Total Suspended Solids	24-hr composite	Monthly
Total Kjeldahl Nitrogen	24-hr composite	Monthly
Total Phosphorus	24-hr composite	Monthly

Table 4 - Monitoring during a <i>By-pass</i> Event (Samples to be collected from the <i>By-pass</i> stream at the sewage treatment plant)	
Sample Type	Grab*
Parameters	<i>BOD5</i> , Total Suspended Solids, Total Phosphorus, <i>E. Coli</i>

* Discrete grab samples must be collected every two (2) hours during a by-pass event, either manually or by automatic sampler, with the first sample collected during the first hour of the event.

Table 5 - Effluent Monitoring (Samples to be collected at the outlet of the disinfection facilities)		
Parameters	Sample Type	Frequency
<i>CBOD5</i>	24-hr composite	Weekly
Total Suspended Solids	24-hr composite	Weekly
Total Phosphorus	24-hr composite	Weekly
Total Ammonia Nitrogen	24-hr composite	Weekly
<i>E. Coli</i>	Grab	Weekly
Acute Lethality to Rainbow Trout and <i>Daphnia magna</i> *	Grab	Quarterly
pH	Grab/Probe	Thrice per week
Temperature	Grab/Probe	Thrice per week

* Toxicity testing for rainbow trout and *daphnia magna* is to be conducted on a quarterly basis, to be reduced to semi-annually (winter and summer) following two straight years of no acute lethality. Further reductions in toxicity testing frequency would be contingent on *District Manager* approval.

(Note: Definitions for grab and composite sample are included in one or more documents below.
24-hour composite sample means a time-composite sample and constitutes of an integrated sample made up of blending 24 hourly aliquots taken by refrigerated autosampler, which are obtained at an hourly frequency having same sample volume.)

(4) The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following:

- (a) The Ministry's Procedure F-10-1, "Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only)", as amended from time to time by more recently published editions;
- (b) The Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" (January 1999), ISBN 0-7778-1880-9, as amended from time to time by more recently published editions;
- (c) The publication "Standard Methods for the Examination of Water and Wastewater" (21st edition), as amended from time to time by more recently published editions.

(5) The temperature and pH of the effluent from the *Works* shall be determined in the field at the time of sampling for Total Ammonia Nitrogen. The concentration of un-ionized ammonia shall be calculated using the total ammonia concentration, pH and temperature using the methodology stipulated in "Ontario's Provincial Water Quality Objectives" dated July 1994, as amended, for ammonia (un-ionized). For the purposes of determining the concentration of unionized ammonia, single representative values of temperature and pH obtained through a probe shall be considered complementary to the 24-hour composite total ammonia nitrogen sample.

(6) A sufficient number of flow measuring devices, calibrated at regular intervals not exceeding one year to ensure their accuracy to within plus or minus 15 per cent (+/- 15%) of the actual rate of flow within the range of 15% to 100% of the full scale reading of the measuring devices, shall be installed, maintained and operated in order to measure and record:

- (a) The quantity of sewage being conveyed to and through the sewage treatment plant; and
- (b) The quantity of sewage being bypassed.

(7) The *Owner* shall install and maintain a continuous flow measuring device, to measure the flowrate of the effluent from *Works* with an accuracy to within plus or minus 15 per cent (+/- 15%) of the actual flowrate for the entire design range of the flow measuring device, and record the flowrate at a daily frequency.

(8) The *Owner* shall retain for a minimum of three (3) years from the date of their creation, all records and information related to or resulting from the monitoring activities required by this *Certificate*.

10. REPORTING

(1) One week prior to the start up of the operation of the *Proposed Works*, the *Owner* shall notify the *District Manager* in writing of the pending start up date.

(2) Ten (10) days prior to the date of a planned *By-pass* being conducted pursuant to Condition 5 and as soon as possible for an unplanned *By-pass*, the *Owner* shall notify the *District Manager* in writing of the pending start date, in addition to an assessment of the potential adverse effects on the environment and the duration of the *By-pass*.

(3) The *Owner* shall report to the *District Manager* or designate, any exceedence of any parameter specified in Condition 7 orally, as soon as reasonably possible, and in writing within seven (7) days of the exceedence.

(4) In addition to the obligations under Part X of the Environmental Protection Act, the *Owner* shall, within 10 working days of the occurrence of any reportable spill as defined in Ontario Regulation 675/98, bypass or loss of any product, by-product, intermediate product, oil, solvent, waste material or any other polluting substance into the environment, submit a full written report of the occurrence to the *District Manager* describing the cause and discovery of the spill or loss, clean-up and recovery measures taken, preventative measures to be taken and schedule of implementation.

(5) The *Owner* shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to *Ministry* staff.

(6) The *Owner* shall prepare, and submit to the *District Manager*, a performance report, on an annual basis, within ninety (90) days following the end of the period being reported upon. The first such report shall cover the first annual period following the commencement of operation of the *Works* and subsequent reports shall be submitted to cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:

- (a) A summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in Condition 7, including an overview of the success and adequacy of the *Works*;
- (b) A description of any operating problems encountered and corrective actions taken;
- (c) A summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the *Works*;

- (d) A summary of any effluent quality assurance or control measures undertaken in the reporting period;
- (e) A summary of the calibration and maintenance carried out on all effluent monitoring equipment; and
- (f) A description of efforts made and results achieved in meeting the Effluent Objectives of Condition 6.
- (g) A tabulation of the volume of sludge generated in the reporting period, an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed;
- (h) A summary of any complaints received during the reporting period and any steps taken to address the complaints;
- (i) A summary of all *By-pass*, spill or abnormal discharge events; and
- (j) Any other information the *District Manager* requires from time to time.

11. REVOCATION OF EXISTING APPROVALS

(1) The descriptions of the approved works and conditions of approval in this *Certificate* apply in place of all the existing descriptions and conditions in the Certificates of Approval under the Ontario Water Resources Act for sewage works which are part of the *Works* approved by this *Certificate*.

(2) Notwithstanding Condition 11(1) above, the original applications for approval, including design calculations, engineering drawings, and reports prepared in support of the existing Certificate(s) of Approval whose descriptions of the approved works and conditions are now replaced pursuant to Condition 11(1) above, shall form part of this *Certificate*.

(3) Where an existing Certificate of Approval referred to in Condition 11(1) above applies to *Works* in addition to the *Works* approved by this *Certificate*, it shall continue to apply to those additional *Works*.

12. SPECIAL CONDITION - LOADING RATES FOR CO-TREATMENT

(1) The *Owner* shall operate and maintain the *Works* such that the design monthly average septage flow of 6.5 cubic metres per day (13 cubic metres per day under peak flow condition) for co-treatment at the *Works* is not exceeded; and

(3) The *Owner* shall operate and maintain the *Works* such that the sum of all daily influent flows during a calendar year, including raw sewage and septage for co-treatment, does not exceed the Rated Capacity of the *Works*.

The reasons for the imposition of these terms and conditions are as follows:

1. Condition 1 is imposed to ensure that the *Works* are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the *Certificate* and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review. The condition also advises the Owners their responsibility to notify any person they authorized to carry out work pursuant to this *Certificate* the existence of this *Certificate*.

2. Condition 2 is included to ensure that, when the *Works* are constructed, the *Works* will meet the standards applicable at the time of Approval of the *Works* are still applicable at the time of construction, to ensure the ongoing protection of the environment.

3. Condition 3 is included to ensure that the *Ministry* records are kept accurate and current with respect to the approved works and to ensure that subsequent owners of the *Works* are made aware of the *Certificate* and continue to operate the *Works* in compliance with it.

4. Condition 4 is included to ensure that record drawings of the *Works* "as constructed" are maintained for future

references.

5. Condition 5 is included to indicate that by-passes of untreated sewage to Rideau River is prohibited, save in certain limited circumstances where the failure to *By-pass* could result in greater injury to the public interest than the *By-pass* itself where a *By-pass* will not violate the approved effluent requirements, or where the *By-pass* can be limited or otherwise mitigated by handling it in accordance with an approved contingency plan.

The notification and documentation requirements allow the *Ministry* to take action in an informed manner and will ensure the *Owner* is aware of the extent and frequency of *By-pass* events.

6. Condition 6 is imposed to establish non-enforceable effluent quality objectives which the *Owner* is obligated to use best efforts to strive towards on an ongoing basis. These objectives are to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs and before the compliance limits of Condition 7 are exceeded.

7. Condition 7 is imposed to ensure that the effluent discharged from the *Works* to Rideau River meets the *Ministry's* effluent quality requirements thus minimizing environmental impact on the receiver and to protect water quality, fish and other aquatic life in the receiving River.

8. Condition 8 is included to require that the *Works* be properly operated, maintained, funded, staffed and equipped such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented. As well, the inclusion of a comprehensive operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the owner and made available to the *Ministry*. Such a manual is an integral part of the operation of the *Works*. Its compilation and use should assist the *Owner* in staff training, in proper plant operation and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a benchmark for *Ministry* staff when reviewing the *Owner's* operation of the work.

9. Condition 9 is included to enable the *Owner* to evaluate and demonstrate the performance of the *Works*, on a continual basis, so that the *Works* are properly operated and maintained at a level which is consistent with the design objectives and effluent limits specified in the *Certificate* and that the *Works* does not cause any impairment to the receiving River.

10. Condition 10 is included to provide a performance record for future references, to ensure that the *Ministry* is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this *Certificate*, so that the *Ministry* can work with the *Owner* in resolving any problems in a timely manner.

11. Condition 11 is included to stipulate that this *Certificate* replaces all previous approvals for the *Works* being the subject of this *Certificate*, and that the existing approvals remain in force for the purpose of any *Works* which are not subject to this *Certificate*.

12. Condition 12 is included to ensure that the *Works* are operated within the design capacity, including septage and landfill leachate co-treatment capability and capacity.

This Certificate of Approval revokes and replaces Certificate(s) of Approval No. 82/5/218 issued on August 4, 1972

In accordance with Section 100 of the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, as amended, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 101 of the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

3. The name of the appellant;

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4. The address of the appellant;
5. The Certificate of Approval number;
6. The date of the Certificate of Approval;
7. The name of the Director;
8. The municipality within which the works are located;

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
655 Bay Street, 15th Floor
Toronto, Ontario
M5G 1E5

AND

The Director
Section 53, *Ontario Water Resources Act*
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca**

The above noted sewage works are approved under Section 53 of the Ontario Water Resources Act.

DATED AT TORONTO this 18th day of January, 2010

Mansoor Mahmood, P.Eng.
Director
Section 53, *Ontario Water Resources Act*

YK/
c: District Manager, MOE Kingston - District
Michael Gundry, P.Eng., AECOM Canada Ltd.