THE CORPORATION OF THE TOWN OF AMHERSTBURG

BY-LAW NO. 2016-25

By-law to enter into an agreement with Ontario Clean Water Agency for the operation, maintenance and management services for Amherstburg Water and Wastewater Treatment Systems

WHEREAS under Section 9 of the Municipal Act 2001, S.O., 2001, c. 25, as amended, a municipality has the capacity, rights, powers and privileges of a natural person for the purpose of exercising its authority under this or any other Act.

AND WHEREAS under Section 8(1) of the Municipal Act 2001, S.O., 2001, c. 25, as amended, shall be interpreted broadly so as to confer broad authority on municipalities to enable them to govern their affairs as they consider appropriate and to enhance their ability to respond to municipal issues;

AND WHEREAS the Council of The Corporation of the Town of Amherstburg deems it expedient to enter into a contract with Ontario Clean Water Agency for the operation, maintenance and management services for Amherstburg Water and Wastewater Treatment Systems;

NOW THEREFORE the Council of The Corporation of the Town of Amherstburg enacts as follows:

- 1. That the Council of The Corporation of the Town of Amherstburg agrees to enter into the contract as attached hereto as Schedule "A" to this By-law.
- 2. That the Mayor and Clerk are hereby authorized to sign and seal said agreement on behalf of The Corporation of Town of Amherstburg.
- 3. This By-law shall come into force and take effect immediately upon the final passing thereof.

Read a first, second and third time and finally passed this 21th day of March, 2016.

MAYOR - ALDO DICARLO

MUNICIPAL CLERK - PAULA PARKER

SERVICES AGREEMENT

BETWEEN

ONTARIO CLEAN WATER AGENCY

AND

THE CORPORATION OF THE TOWN OF AMHERSTBURG

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SERVICES AGREEMENT

THIS AGREEMENT effective as of the 1st day of April, 2016 (the "Effective Date"),

BETWEEN

ONTARIO CLEAN WATER AGENCY/AGENCE ONTARIENNE DES EAUX, a corporation established under the *Capital Investment Plan Act*, 1993, c.23, Statutes of Ontario.

("OCWA")

AND

THE CORPORATION OF THE TOWN OF AMHERSTBURG

(the "Client")

RECITALS

- (a) OCWA is in the business of providing management, operations and maintenance services for water and wastewater facilities.
- (b) The Client is the owner of the Town's Water and Wastewater facilities, more particularly described in Schedule A (the "Facilities").
- (c) The Client wishes to retain the services of OCWA to operate and maintain the Facilities in accordance with the provisions of this agreement (the "Agreement").
- (d) The Client and OCWA (collectively, the "Parties" and each a "Party") are entering this Agreement to set out their respective rights and obligations with respect to the management, operation and maintenance of the Facilities.
- (e) The Council of the Client on the 21 day of March, 2016 passed By-Law No. 2016 25 authorizing the Client to enter into this Agreement.

NOW THEREFORE in consideration of the mutual covenants contained in this Agreement and other good and valuable consideration the receipt and sufficiency of which is hereby irrevocably acknowledged, the Client and OCWA agree as follows:

ARTICLE 1 - INTERPRETATION

Section 1.1 - Definitions

In this Agreement, definitions are set out in Schedule B, or within applicable provisions as indicated.

ARTICLE 2 - RESPONSIBILITIES OF OCWA

Section 2.1 - Retention of OCWA

- (a) The Client retains OCWA to provide management, operation and maintenance services, as described in Schedule C to this Agreement, in respect of the Facilities (the "Services").
- (b) The Client acknowledges and agrees that for the purposes of Section 449 of the *Municipal Act*, 2001, S.O. 2001, c.25, as amended, OCWA is an agent of the Client.

Section 2.2 - Performance of Services

- (a) OCWA shall deliver the Services in compliance with all applicable Laws, except as described in Paragraphs 2.2(b) and (c) below and in any of the following circumstances:
 - the Client not making the Major Maintenance Expenditures and/or not undertaking the Capital Projects reasonably recommended by OCWA as per Section 4.6 and Section 4.7 herein;
 - (ii) failure of the Client to meet its responsibilities specified in this Agreement;
 - (iii) failure of any equipment at the Facilities, unless the failure is due to OCWA's negligence;
 - (iv) the water transmitted to the water treatment Facilities for treatment contains contaminants or pathogens which cannot be treated or removed by the Facilities treatment processes;
 - (v) the quantity or quality of water transmitted to the water treatment Facilities exceeds the Facilities' design or operating capacity;
 - (vi) the wastewater transmitted to the wastewater treatment Facilities for treatment contains contaminants or other substances which cannot be treated or removed by the Facilities treatment processes;
 - (vii) the wastewater transmitted to the wastewater treatment Facilities for treatment does not meet the requirements of the Client's sewer use by-law or any Environmental Law;

- (viii) the quantity or quality of wastewater transmitted to the wastewater treatment Facilities exceeds the Facilities' design or operating capacity;
- (ix) operational upset conditions caused by the acceptance of septage or leachate;
- (x) unavailability of approved lands for the application of sludge.
- (b) OCWA may temporarily cease to provide or reduce the level of provision of Services in the event of an emergency, a breakdown or any Uncontrollable Circumstance. OCWA shall, when practicable, try to give the Client reasonable advance notice of any such occurrence.
- (c) Notwithstanding any other provision of this Agreement, delay in the performance of, or a failure to perform any term of this Agreement by OCWA, shall not constitute default under this Agreement or give rise to any claim for damages suffered by the Client if and to the extent caused by occurrences or circumstances beyond the reasonable control of OCWA (an "Uncontrollable Circumstance"), including but not limited to any circumstances set out in Paragraph 2.2(a), decrees of government, acts of God (including but not limited to hurricanes, tornadoes, floods and other weather disturbances), sabotage, strikes, lockouts and other industrial disturbances, insurrections, war, civil disturbances, pandemics, riots, explosions, fire and acts of third parties.
- (d) In the event that OCWA determines that a deficiency exists with respect to the operation of the Facilities, OCWA will use its best efforts to contact the Client and obtain the Client's approval prior to undertaking any remedial measures to correct the deficiency. The Client acknowledges that such measures may be beyond the scope of the Services and thus subject to an additional charge
- (e) The Client recognizes that in an emergency situation or where an Uncontrollable Circumstance exists, OCWA's primary concern will be to use all reasonable efforts to maintain the Facilities in compliance with Environmental Laws and that OCWA may be required to correct a deficiency or deal with the emergency situation without obtaining the Client's prior approval. Should such a situation arise, OCWA shall advise the Client as soon as reasonably possible and shall provide as much information as possible to the Client and will work with the Client to ensure the emergency situation is appropriately addressed.

Section 2.3 - Standard of Care

OCWA shall deliver the Services as would a reasonable operator with like skills in like circumstances.

Section 2.4 - OCWA as Independent Contractor

In performing the Services, OCWA shall be acting as an independent contractor and only to the extent and for the specific purposes expressly set forth herein. Neither OCWA nor its employees, agents or subcontractors shall be subject to the direction and control of the Client, except as expressly provided in this Agreement.

Section 2.5 - Authorized Representatives

Each of OCWA and the Client shall be entitled to designate in writing to the other, one or more individuals who shall be authorized to represent it in connection with the day-to-day administration of the provisions of this Agreement (the "Authorized Representative(s)"). Each of the Parties shall be entitled to rely on the acts and approvals given by the other Party's Authorized Representative until such time as it receives a written notification of change of the other Party's Authorized Representative.

Section 2.6 - Indemnification of the Client

- (a) OCWA shall exonerate, indemnify and hold harmless the Client, its directors, officers, employees and agents from and against Claims which may be suffered or incurred by, accrue against or be charged to or recoverable from the Client to the extent that such Claim is solely attributed to OCWA's negligence or willful misconduct when performing the Services, except where such Claim is due to an Uncontrollable Circumstance or to a condition of the Facilities which existed prior to OCWA's commencement of the Services (a "Pre-existing Condition"), including but not limited to those listed in Schedule F. Such Pre-existing Conditions shall be the ongoing responsibility of the Client. OCWA, in providing these Services, is not responsible, accountable or liable, in any way, for Pre-existing Conditions, either directly or indirectly.
- (b) The Client shall be deemed to hold the provisions of this Section 2.5 that are for the benefit of the Client's directors, officers, employees and agents in trust for such directors, officers, employees and agents as third party beneficiaries under this Agreement.
- (c) Notwithstanding Paragraph 2.5(a) above, OCWA shall not be liable in respect of any Claim to the extent the Claim is covered by the Insurance.

Section 2.7 - Insurance

(a) OCWA shall maintain, subject to reasonable availability, insurance coverage as described in Schedule E to this Agreement (the "Insurance") and the Client shall be an additional insured under the Commercial General Liability and Contractor's Pollution Liability insurance. The Client acknowledges that, given the unpredictability of the insurance market, deductibles and coverage limits may not be available (or may not be reasonably

- priced) from year to year. The Client and OCWA will review the insurance coverage annually to determine whether there will be a change in coverage or price increase.
- (b) The Client specifically recognizes and agrees that neither OCWA nor the Crown bears any responsibility for the Pre-existing Condition(s) of the Facilities. As such, OCWA is not required to obtain insurance for this purpose and the Client has or will obtain its own insurance.
- (c) The Client shall be responsible for securing its own insurance for any other operations with which it is involved that are not part of the Services. The Client acknowledges that OCWA's Commercial General Liability and Contractor's Pollution Liability insurance shall not extend to cover any claims, exposure or liability beyond those directly linked to the provision of Services by OCWA staff. The Client further acknowledges that it will have no recourse under OCWA's Commercial General Liability and Contractor's Pollution Liability insurance for any operations that do not form part of the Services.
- (d) In the event of a claim under the Insurance, the payment of deductibles is as specified in Schedule E. Both Parties will pay their own deductibles.
- (e) No later than thirty (30) days following the Effective Date of this Agreement, the Client will provide certificates of insurance for its property and boiler and machinery insurance policies to OCWA. The insurance coverage for both policies should be on a full replacement cost basis.

Section 2.8 - Representations and Warranties of OCWA

OCWA represents and warrants to the Client that the following are true and correct:

- (a) that it has full power and authority and has taken all necessary steps to enter into and perform its obligations under this Agreement; and
- (b) OCWA's staff are trained and capable of providing the Services set out under this Agreement.

ARTICLE 3 - RESPONSIBILITIES OF THE CLIENT

Section 3.1 - Obligations of the Client

- (a) The Client has the full power and authority to enter into and perform its obligations under this Agreement.
- (b) The Client has passed all necessary By-Laws and has obtained all necessary
 Authorizations to enable it to enter into and perform its obligations under this Agreement
 and to operate the Facilities, (including, without limitation, any Authorizations required

- from the Ontario Municipal Board and the Ministry of the Environment and Climate Change), and the Authorizations are in good standing.
- (c) The Client has provided OCWA with a true copy of each of the Authorizations referred to in Paragraph 3.1(b) above prior to the date of this Agreement, including a certified copy of each municipal By-Law required to authorize the Client to enter into and perform its obligations under this Agreement.
- (d) As the owner of the Facilities, the Client is fully aware of its responsibilities and obligations regarding the operation and maintenance of the Facilities under Applicable Laws, including without limitation its responsibilities under the Safe Drinking Water Act, 2002 (the "SDWA"), the Ontario Water Resources Act and the Occupational Health and Safety Act (the "OHSA") and their regulations.
- (e) The Client confirms that there are no Pre-existing Conditions existing at the Facilities which would affect OCWA's ability to operate the Facilities in compliance with the terms of this Agreement and Applicable Laws, other than what is listed in Schedule F. The Client acknowledges and agrees that the Client shall be responsible for addressing such Pre-existing Conditions.
- (f) The Client confirms that as of the date of execution of this Agreement, to the best of the Client's knowledge, the Facilities are in compliance with all Applicable Laws.
- (g) The Client is not aware of the presence of any designated substances as defined under the Occupational Health and Safety Act (the "OHSA") at the Facilities. The Client acknowledges and agrees that it is responsible for dealing with the designated substances (including but not limited to asbestos and lead) in accordance with the OHSA and its regulations and to notify OCWA of the location of any designated substances in the Facilities.

Section 3.2 - Covenants of the Client

The Client hereby covenants the following for the benefit of OCWA:

- (a) The Client agrees to promptly pay all amounts owing to OCWA under this Agreement as they become due, including any interest charges on late payments as determined under Section 4.10.
- (b) The Client agrees to promptly provide OCWA with any information relating to the Facilities which could have a bearing on the provision of Services by OCWA, including but not limited to any engineering report prepared in respect of the Facilities, any Authorization or amendment to any Authorization, as well as any governmental notice or order relating to the Facilities.
- (c) The Client agrees to commit the necessary resources to appropriately address and comply with any such reports, Authorizations, notices or orders.

- (d) The Client shall repair, maintain and keep in a good working state, in accordance with good engineering practices and the standards reasonably applicable to an owner of a like facility, all water works that belong to or are under the control of the Client and that distribute water from the Facilities.
- (e) The Client shall repair, maintain and keep in a good working state, in accordance with good engineering practices and the standards reasonably applicable to an owner of a like Facility, all wastewater works that belong to or are under the control of the Client and that collect and transmit wastewater to the Facilities.
- (f) The Client agrees to promptly commit the necessary resources to appropriately address any health and safety issues identified by OCWA which are the responsibility of the Client.
- (g) The Client shall take reasonable steps to ensure that wastewater transmitted to the Facilities complies with the Client's sewer use by-law and any Environmental Laws. If requested by OCWA, the Client shall provide OCWA with copies of the Client's inspection reports (sewer usage, cross-connections, sump pump connections), if available.
- (h) The Client shall inform OCWA if the Facility is to accept septage or leachate. The Client shall provide OCWA with a report of a professional engineer indicating that the Facility is capable of handling such additional Loadings. The Client shall provide OCWA with a list of haulers from which OCWA is to accept septage or leachate at the Facility. OCWA shall not be responsible for any operational impacts caused by the septage or leachate. The Client shall be fully responsible for any additional costs incurred as a result of the acceptance of septage or leachate at the Facility.

Section 3.3 - Exoneration and Indemnification of OCWA

- (a) Subject to Paragraph 3.3(c) below, the Client shall exonerate, indemnify and hold harmless OCWA, its directors, officers, employees and agents and Her Majesty the Queen in Right of Ontario, as represented by the Minister of the Environment and Climate Change and all directors, officers, employees and agents of the Ministry of the Environment and Climate Change (collectively referred to as the "Indemnified Parties") from and against any and all Claims which may be suffered or incurred by, accrue against, or be charged to or recoverable from any one or more of the Indemnified Parties that is solely attributed to the Client's negligence or willful misconduct.
- (b) OCWA shall be deemed to hold the provisions of this Article 3 that are for the benefit of OCWA's directors, officers, employees and agents and the other Indemnified Parties as defined above, in trust for all such Indemnified Parties as third party beneficiaries under this Agreement.

- (c) Notwithstanding Paragraph 3.3(a) above, the Client shall not be liable in respect of any Claim:
 - (i) to the extent that such Claim is covered by the Insurance; however, the Client shall be responsible for any deduction or self-insured retention amount in accordance with Schedule E; and
 - (ii) To the extent that such Claim is caused solely by OCWA's negligence or willful misconduct in providing the Services.

ARTICLE 4 - TERM, PAYMENT FOR SERVICES AND OTHER CHARGES

Section 4.1 - Initial Term of Agreement

This Agreement shall start on the Effective Date of April 1st, 2016 and shall continue in effect for an initial term of five (5) years, ending on March 30th, 2021 (the "Initial Term") and then may be renewed for successive five (5) year terms (each a "Renewal Term") upon agreement between the Parties, subject to Sections 4.3 and 6.1 of this Agreement.

Section 4.2 - Annual Price for the Initial Term

Subject to any adjustments made pursuant to other provisions of this Agreement, the Client shall pay OCWA a price for the Services for each Year of the Initial Term as described in Schedule D.

Section 4.3 - The Annual Price in Renewal Terms

The Annual Price for any Renewal Term will be as agreed between the Client and OCWA. If the Parties cannot agree on the Annual Price for any Renewal Term within six (6) months of the beginning of the last Year of either the Initial Term or the Renewal Term, as the case may be (the "Current Term"), then this Agreement will be terminated twelve (12) months after the last day of the Current Term unless the Parties mutually agree to extend the term of the Agreement. During this twelve (12) month period or mutually agreed upon extension period, the Client shall pay the Annual Price paid for the last Year of the Current Term, plus an adjustment for inflation calculated as described in Schedule D, pro-rated over that period.

Section 4.4 - Payment of the Annual Price

The Client shall pay OCWA the Annual Price for each Year of the Initial Term or any Current Term, in twelve (12) equal monthly payments, in advance, on the first day of each month. The first payment shall be due and payable on April 1, 2016 OCWA will invoice the Town at the beginning of each month. The Town will then issue a cheque to OCWA within 30 days of receiving the invoice.

Section 4.5 - Items Not Included in the Annual Price

The Annual Price, as further descried in Schedule "D", for each Year of the Initial Term and any Renewal Term, covers all charges for the Services, but does not include any charges for the following:

- (a) any Capital Projects (as defined in Paragraph 4.7(a) below) or costs resulting from any failure of the Client to implement reasonably recommended Major Maintenance Expenditures;
- (b) costs or charges for services resulting from a Change in Applicable Laws;
- (c) Unexpected Expenses (as defined in Paragraph 4.8(a) below);
- (d) Hydro costs;
- (e) charges for any Optional Services that are provided by OCWA at the request of the Client;
- (f) costs and charges associated with providing and/or maintaining continuous monitoring technology (SCADA technology) used in respect of the Facility;
- (g) any charges resulting from a significant increase in Loadings (as measured by sludge production), as set out in Part 1 of Schedule G to this Agreement;
- (h) Initial and Final Condition Surveys.

Section 4.6 – Minor Maintenance Expenditures

- (a) "Minor Maintenance Expenditures" means the charges for all routine, repetitive activities, repair or replacement of machinery or equipment required for the continuity of operations, safety, and operating performance of the Facilities that are necessary to prevent or correct a failure of any component of the equipment which is not included as part of Routine Maintenance.
- (b) There will be no Service Fee charged for Minor Maintenance up to a limit of \$300,000 in each Year. Any amount over the limit will be charged the Service Fee or fixed fee basis and labour charges.
- (c) The Service Fee will also apply to any individual Minor Maintenance item exceeding \$25,000.
- (d) OCWA will not be required to obtain the prior approval of the Client for any Minor Maintenance item costing less than \$5,000.00.

- (e) The Client's written approval (the "Approved Minor Maintenance Expenditures") for any items in excess of \$5,000, in the form set out in Schedule "J", authorizing OCWA to incur the Minor Maintenance Expenditure must be completed prior to the commencement of the Minor Maintenance.
- (f) OCWA will invoice the Client for the Approved Minor Maintenance Expenditures together with supporting documentation and the Client shall pay the invoice within sixty (60) days of the date of invoice.

Section 4.7 - Major Maintenance Expenditures

- (a) "Major Maintenance Expenditures" means the charges for all non-routine, non-repetitive activities, repair or replacement of machinery or equipment required for the continuity of operations, safety, and operating performance of the Facilities that are necessary to prevent or correct a failure of any component of the equipment which is not included as part of Routine Maintenance including labour charges, together with the Service Fee or fixed fee basis.
- (b) No later than October 1st of each Year this Agreement is in force, or a date as the Parties may agree in writing, OCWA will provide the Client with rolling six (6)-year recommendations for Major Maintenance Expenditures required for the long term operation of the Facilities. The Client's written approval of the estimate or revised estimate, in the form set out in Schedule "J", authorizes OCWA to incur the Major Maintenance Expenditures included in the estimate (the "Approved Major Maintenance Expenditures").
- (c) OCWA will invoice the Client for the Approved Major Maintenance Expenditures together with supporting documentation and the Client shall pay the invoice within thirty (30) days of the date of invoice.

Section 4.8 - Capital Projects

- (a) "Capital Projects" means changes and improvements to the Facilities which include the installation of new technology, improvements to the efficiency, performance and operation of the Facilities, replacement of major pieces of equipment, structural modifications to the Facilities and the construction and commissioning of new Facilities.
- (b) During the term of this Agreement, the Client may request OCWA to undertake Capital Projects for the Client. The terms and conditions of such Capital Projects including the fee shall be negotiated by OCWA and the Client.

Section 4.9 - Unexpected Expenses

- (a) "Unexpected Expenses" means unanticipated expenditures or additional costs which may include Major Maintenance Expenditures in addition to the Approved Major Maintenance Expenditures, that OCWA reasonably incurs in order to address a Change in Applicable Laws, any Uncontrollable Circumstance, any work required by regulatory order (e.g. MOECC or MOL) or identified through an inspection (e.g. ESA, MOECC, MOL) that is not solely the result of OCWA's negligence in performing the Services or any other emergency situation, together with the Service Fee.
- (b) In the event that OCWA is required to incur Unexpected Expenses, the prior approval of the Client with respect to those Unexpected Expenses will be required only if time permits. Within ten (10) days of incurring the Unexpected Expenses, OCWA will provide the Client with a report detailing the reasons the Unexpected Expenses were incurred.
- (c) Any Unexpected Expenses will be invoiced to the Client together with appropriate supporting documentation, and the Client shall pay the invoice within thirty (60) days of the date of the invoice.
- (d) In the event that OCWA is required to incur Unexpected Expenses, OCWA will not be required to obtain the prior approval of the Client for any Maintenance Expenditure item costing less than \$5,000.00. OCWA will be required to provide the client with a report detailing the reasons the Unexpected Expenses were incurred.

Section 4.10 - Interest on Late Payments

- (a) Monthly Payment of Annual Fee. If the Client's monthly payment of the Annual Fee is not available in OCWA's designated bank account on the agreed to date of payment, OCWA will notify the Client that the funds were not available. Interest will be charged to the Client starting from the day after the payment was due in the account. Interest shall be paid at a rate determined by the Minister of Finance, from time to time, as payable on overdue accounts, in accordance with the Lieutenant Governor in Council under s.10(4) of the Financial Administration Act, R.S.O. 1990, c.F.12, plus any banking charges and an administrative fee.
- (b) Other Invoices. Invoices, other than for the monthly payment set out in Section 4.10(a) above, shall be paid no later than sixty (60) days from the date of the invoice and interest shall begin to accrue one (1) day after the payment is due.

Section 4.11 - Partial Payment of Disputed Invoices

(a) If the Client disputes any portion of an invoice, the Client shall pay to OCWA the undisputed portion of the invoice by the due date set out herein and provide OCWA with written notice of such dispute by the due date. Failure to provide such written notice of any such dispute will act as a waiver of any defence or justification for failing to pay the full amount of the invoice by the due date. Within ten (10) days of resolution of the disputed amount, the Client shall pay to OCWA all amounts determined to be payable to OCWA, plus interest in accordance with Section 4.10(a).

- (b) If the Client disputes any portion of an invoice, the Client shall nonetheless pay to OCWA the undisputed portion of the invoice by the due date and shall also continue to pay all monthly payments of the Annual Price due on the first of each month. If any additional amount is finally determined to be payable to OCWA, the Client shall pay OCWA the additional amount, plus interest as provided in Section 4.8 above, within ten (10) days from the date of final determination.
- (c) If the disputed charges cannot be resolved within 45 days, the Parties shall seek resolution in accordance with Article 5, Dispute Resolution

Section 4.12 - Hydro Costs

OCWA is not responsible for paying any Hydro Costs in respect of the Facilities. The Client shall pay all Hydro Costs and Natural Gas.

Section 4.13 - Optional Services

- (a) If requested by the Client, OCWA may provide Optional Services to the Client by Change Order as set out in Schedule J, provided that the Client and OCWA agree in writing to the specific scope of work required.
- (b) Unless otherwise agreed to in writing, fees for Optional Services which OCWA agrees to provide to the Client shall be billed directly to the Client on a time and materials basis as described in Schedule D.
- (c) Once OCWA has agreed to provide Optional Services to the Client, the Optional Services shall be subject to the terms and conditions of this Agreement, with any necessary changes having been made.
- (d) The labour and mileage rates described in Schedule D will be reviewed annually by OCWA and the Town and may be subject to change.

Section 4.14 - Changes to the Agreement

- (a) A Change to the Agreement may be carried out after execution of this Agreement by Change Order. A Change Order shall be based upon agreement between the Parties and shall be reflected in a Change Order Form.
- (b) The Parties shall execute a Change Order Form when, any proposed change to the Services described in Schedule C, which has the effect of changing the Annual Price, and is accepted by both parties in the form set out in Schedule H which will state their agreement upon all of the following:

- (i) the services to be provided;
- (ii) fees for the services provided under the Change Order;
- (iii) the extent of the adjustment to the maintenance and operating schedule, if any;
- (iv) the extent of any adjustments to the Annual Price, if any; and
- (v) all other effects that the change has on the provisions of this Agreement.

ARTICLE 5 - DISPUTE RESOLUTION

Section 5.1 - Mediation

- (a) If a dispute arises between the Client and OCWA which cannot be resolved within forty five (45) days, then the issue shall be referred to a mediator.
- (b) The fees and expenses of the mediator shall be divided equally between the Parties.
- (c) Involvement in mediation is on a without prejudice basis and does not preclude and is not a bar to either Party pursuing whatever legal remedies may be available, including litigation.

ARTICLE 6 - TERMINATION

Section 6.1 - Termination of Agreement

- (a) At least one (1) calendar year before the expiry of the Current Term, the Client shall notify OCWA in writing whether it wishes to terminate or renew this Agreement at the end of the Current Term. However, OCWA reserves the right to decline to renew the Agreement by notifying the Client in writing of its decision to decline, within thirty (30) days of receipt of the Client's written request to renew.
- (b) During the Initial Term or any Renewal Term, this Agreement may only be terminated by either the Client or OCWA by giving at least thirty (30) days' notice in writing to the other Party if:
 - (i) there has been a material breach of the Agreement;
 - (ii) the Party complaining of the breach has given written notice of the breach to the other Party; and
 - (iii) the other Party does not correct the breach within thirty (30) days of receiving the notice.
- (c) If either Party disputes the existence of a breach or that the breach is material, then the dispute may be referred to mediation under Section 5.1 of this Agreement.

Section 6.2 - Early Termination

- (a) If this Agreement is terminated for any reason with the exception of a material breach by OCWA prior to the expiry of the Current Term, then the Client shall pay OCWA for all Services provided up to the date of termination, as well as any costs relating to the early termination, including but not limited to demobilization and severance costs (in accordance with the collective agreements between OCWA and its employees); the costs associated with the removal of remote monitoring and control systems installed by OCWA; the costs of cancelling agreements with suppliers and subcontractors; as well as any previously incurred Major Maintenance Expenditures, costs related to Capital Projects, Unexpected Expenses and Optional Services.
- (b) If this Agreement is terminated due to a material breach by OCWA prior to the expiry of the Current Term, then the Client shall pay OCWA for all Services provided up to the date of the termination but shall not pay any of the costs related to early termination described in Paragraph 6.2 (a)

Section 6.3 - Inventory Count of Consumables/Supplies

OCWA and the Client will conduct an inventory count of consumables/supplies at the Facilities on the first day of the Initial Term or as soon as the Parties may agree. If OCWA no longer operates the Facilities at termination of this Agreement, OCWA shall either:

- (a) ensure that there is the same amount of consumables/supplies at the Facilities on the date of termination as there was on the first day of the Initial Term; or
- (b) reimburse the Client for any shortfall.

If the amount of consumables/supplies at the Facilities on the date of termination exceeds the amount on the first day of the Initial Term, the Client will either reimburse OCWA for any excess or OCWA may take possession of any excess, as OCWA may determine.

Section 6.4 - Final Settlement

If OCWA ceases to operate the Facilities, there shall be a final settlement of all accounts with respect to the Annual Price and any other expenses incurred by OCWA and amounts owing by or to the Client under this Agreement, no later than ninety (90) days after OCWA ceases to provide the Services or sixty (60) days after OCWA has provided the Client with a final invoice, whichever comes later.

Section 6.5 - Transfer of Operations

Upon the termination of this Agreement, OCWA will return the following to the Client:

(a) The log books for the Facilities.

- (b) The original operations manuals that were provided by the Client to OCWA at the commencement of the Services with all updates to the expiry date of the Agreement.
- (c) A list of emergency phone numbers from the contingency plan binders used by OCWA staff in respect of the Facilities.
- (d) Maintenance and repair records of equipment at the Facilities in electronic format.
- (e) The operational plans related to the Town's WDS under the Drinking Water Quality Management Standard (DWQMS) and any Standard Operating Procedures (SOPs) identified in the DWQMS.

ARTICLE 7 - LIABILITY

Section 7.1 - Causes Beyond Control

Notwithstanding any other provision in this Agreement, failure or delay in performance by any Party of any term of this Agreement, shall be excused to the extent caused by any event beyond such Party's reasonable control provided the Party prevented from or delayed in rendering performance notifies the other Party in writing immediately and in detail, of the commencement and nature of such a cause and provided further that such Party uses its best efforts to render performance in a timely manner utilizing to such end all resources reasonably required in the circumstances, including obtaining supplies or services from other sources if they are reasonably available.

ARTICLE 8 - GENERAL

Section 8.1 - Ownership of Technology

- (a) The Client acknowledges and agrees that in providing the Services, OCWA may utilize certain technology developed by or for OCWA, for example, OCWA's WMMS, Outpost 5 and/or PDM (the "Technology"). The Client further agrees that use of the Technology by OCWA with respect to the Facilities does not in any way give the Client any ownership or licensing rights in or to the Intellectual Property Rights to the Technology unless otherwise agreed to in writing between the Parties. For greater certainty, nothing in this Section 7.1 shall be interpreted as requiring OCWA to provide the Client with the Technology and any upgrades or other similar technology in respect of the Facilities as part of the Annual Price.
- (b) If this Agreement is Terminated in accordance with Paragraphs 6.1 and 6.2(a), then the Parties may negotiate licences for the Client to use the Technology developed by OCWA to operate the Facilities (i.e. WMMS, Outpost 5 and/or PDM). The price, duration and conditions of each licence will be reflected in a written agreement between the Parties. If the Parties cannot

agree on the terms of such licence, the issue of the terms of the licence shall be referred to mediation in accordance with the provisions of Article 5, Dispute Resolution.

Section 8.2 - Agreement to Govern

If there is any inconsistency between the main body of this Agreement and any Schedule to this Agreement, then the provision in the main body of this Agreement shall govern.

Section 8.3 - Entire Agreement

This Agreement constitutes the entire agreement between the Client and OCWA with respect to the subject matter hereof and cancels and supersedes any prior understandings, undertakings, representations, warranties, terms, conditions and agreements, whether collateral, express, implied or statutory, between the Client and OCWA with respect thereto.

Section 8.4 - Change in Circumstance

- (a) In the event that there is a change in circumstances or condition that is not covered under the terms of this Agreement, including, without limitation, a Change in Applicable Laws or change in the scope of services provided (a "Change in Circumstance"), then the Party asserting the occurrence of such Change in Circumstance shall give written notice to the other Party, and the written notice shall contain:
 - (i) details of the Change in Circumstance;
 - (ii) details of the inadequacy of this Agreement; and
 - (iii) a proposal for an amending agreement to remedy the Change in Circumstance.

The Parties shall negotiate in good faith any amendments to this Agreement necessary to give effect to or comply with the Change, including any adjustments to the Annual Price or the Services to be provided, which shall be effected as of the date of the Change. If the Parties dispute the existence of a Change, or the recommendation proposed to rectify the Change or the terms and provisions of any amendment to the Agreement, then either Party may refer the dispute to mediation under Article 5, Dispute Resolution.

Section 8.5 - Amendments and Waivers

No amendment to this Agreement will be valid or binding unless it is in writing and duly executed by both of the Parties hereto. 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 Party purporting to give such waiver and, unless otherwise provided, will be limited to the specific breach waived.

Section 8.6 - Successors and Assigns

This Agreement shall operate to the benefit of and be binding upon, the Parties hereto and their successors and assigns. This Agreement may be assigned in the discretion of either Party.

Section 8.7 - Survival

All outstanding payment obligations, and the confidentiality obligation under Section 8.11, shall survive indefinitely the termination of this Agreement.

Section 8.8 - Severability

If any provision of this Agreement is determined to be invalid or unenforceable in whole or in part, such invalidity or unenforceability shall attach only to such provision and everything else in this Agreement shall continue in full force and effect.

Section 8.9 - Notices

(a) All notices required or permitted to be given under this Agreement shall be in writing and shall be deemed to be properly given if hand-delivered, sent by email, sent by confirmed facsimile or by registered mail postage prepaid, return receipt requested, or by courier, to the Parties at their respective addresses as set forth below, or to such other addresses as the Parties may advise by like notice. Such notices if sent by email facsimile, registered mail or courier shall be deemed to have been given when received.

if to the Client:

The Corporation of the Town Of Amherstburg

512 Sandwich St South Amherstburg, Ontario

N9V 3R2

P: 519-736-3664 x 313 F: 519-736-7080

Attention: Todd Hewitt, Manager of Engineering and Operations

if to OCWA:

Ontario Clean Water Agency

1100 Dearness Drive, Unit 18

London, Ontario

N6E 1N9

P: 519-680-1310, x 7003

F: 519-680-1390

Attention: Susan Budden, Business Development Manager

(b) A Party to this Agreement may change its address for the purpose of this Section by giving the other Party notice of such change of address in the manner provided in this Section.

Section 8.10 - Counterparts

This Agreement may be executed in counterparts, each of which shall constitute an original and all of which taken together shall constitute one and the same instrument.

Section 8.11 - Freedom of Information

The Parties understand that this Agreement and any materials or information provided to OCWA through the performance of the Services may be subject to disclosure under the *Freedom* of *Information and Protection of Privacy Act*, R.S.O. 1990, c.F.31, as amended, or as otherwise required by law.

Section 8.12 - Confidentiality

The Parties shall strictly maintain confidential and secure all material and information provided, directly or indirectly, by the other Party pursuant to this Agreement. Subject to relevant legislation related to freedom of information or the protection of privacy and any other laws, neither Party shall directly or indirectly disclose to any person, either during or following the term of this Agreement, any such material or information provided to it by the other Party without first obtaining the written consent of the Party who provided such material or information, allowing such disclosure.

IN WITNESS WHEREOF the Parties have duly executed this Agreement.

Date of Signing

By: Authorized Signing Officer)

By: Authorized Signing Officer)

By: Authorized Signing Officer)

THE CORPORATION OF THE TOWN OF AMHERSTBURG

Date of Signing

By: Aldo Dicarlo? Mayor

By: Aldo Dicarlo? Mayor

By: Aldo Dicarlo? Mayor

SCHEDULE A - The Facilities

Part 1. Description of the Facilities

For the purposes of this Agreement, the description of the Facilities is set out in the following document(s):

Water Facility Details

The Amherstburg Water Treatment Plant has a rated capacity of 18,184 m³/d, serving a population of approximately 20,000 people.

The Water Treatment Plant consists of approximately 155 m of 900mm diameter intake crib; a low lift pumping station equipped with a traveling screen, three vertical turbine pumps two each capable of delivering 107.3 L/s at 21.3 m Total Dynamic Head and a third capable to delivering 265 L/s at 21.3 m TDH; a solids contact clarifier with a capacity of 211 L/s at an overflow rate of 2.92 m/hr; a filter building; four dual media filters; a chemical control and office building; a high lift pumping station equipped with three vertical turbine pumps with two each capable of delivering 133 L/s at 52 m TDH and the third capable of delivering 265 L/s at 58 m TDH; a backwash pump capable of delivering 411 L/s at 14.9 m TDH; a 14,900 m³ underground storage reservoir; a garage; a disinfection room utilizing chlorine gas dispensed from ton containers; fluoride storage and chemical feed equipment, together with the installation of all associated control equipment chemical feed equipment; 410 KW diesel generator; and yard piping.

The Facility also includes an elevated water tower with a capacity of 500,000 Gallons (2,273 cubic meters).

Part 2. Street Address of the Facility

The street address of the Facility is as follows:

Amherstburg Water Treatment Plant 415 Front Road North Amherstburg, Ontario N9V 2V5

Amherstburg Water Tower 99 Thomas Road Amherstburg, Ontario N9V 2Y9

Wastewater Facility Details

Amherstburg Wastewater Treatment Plant

Primary Clarifiers;

- 1. Two (2) 24 m x 11.5 m x 4.5 m Side Water Depth (SWD) primary clarifiers each equipped with chain and flight sludge removal system, an automated scum removal trough and a shared scum hopper;
- 2. One (1) scum pump rated at 36m/h at 2.5 m TOH; and
- 3. Two (2) raw sludge pumps with variable speed control each with an operating range of 45 m/h at 8m TDH to 75 m/h at 40 m TOH.

Treatment Works Standby Power:

1. One (1) 910 kW diesel generator with 5,980 L capacity fuel storage tank.

Septage Holding Tank:

1. One (1) 6 m x 3.6 m x 4 m SWD holding tank with a capacity of 74m3 and equipped with two (2) variable speed submersible horizontal chopper pumps to receive septage for cotreatment.

Influent Screening:

 Two (2) influent screen channels, one equipped with a mechanically cleaned bar screen with 12.7 mm bar spacing and having a Peak Flow Rate of 31,000 m/d and one equipped with a manual bar screen with 25.4 mm bar spacing for emergency or maintenance bypass; and one (1) screenings washer and compactor having a capacity of 1.4 m/h.

Channel Aeration:

Coarse bubble channel aeration system and one (1) blower rated at 795 m3/h at 124 kPa.

Grit Removal

- 1. Two (2) 6m x 3m x 3.45m SWD spiral roll aerated grit tanks each with a capacity of 60 m equipped with coarse bubble diffusers;
- 2. Two (2) aeration blower (one standby) each rated at 244 m3/h; two (2) 6m long 280 mm diameter shaft less screw grit augers;
- 3. Two (2) grit pumps each with a capacity of 50m/h; two grit hydro cyclones; and one (1) rid classifier

Aeration Tanks:

- Two (2) 22m x 12.9m x 6m SWD aeration tanks each with an inlet anoxic zone equipped with a submersible mixer and an aeration zone in a three pass configuration and equipped with fine bubble diffusers in tapered air distribution arrangement.
- 2. Two (2) blowers (one standby), each rated at 3,040 m3/h.

Secondary Clarifiers:

- 1. Two (2) 34.3 m x 13.4 x 5.5 m SWD secondary clarifiers each equipped with chain and flight sludge removal system, an automated scum removal trough and scum put;
- 2. Two (2) scum pumps each rated at 28m/h at 2.4 m TOH;
- 3. Four (4) return activated sludge pumps with variable speed control (two standby) each rated at 198 m/h at 4.3m TDH; and
- Two (2) waste activated sludge pumps with variable speed control each rated at 22.7 m/h at 2.7m TOH;

Phosphorus Removal:

- 1. Two (2) 22.5 m3 chemical storage tanks; and
- 2. Four (4) chemical feed pumps (one standby) each with a flow range between 10 and 108 L/h.

U.V. Disinfection:

1. Two (2) channels equipped with Ultraviolet (UV) disinfection system having a Peak Flow rate of 31,000 ml/day with both channels in operation, and up to 23,289 ml/day with only one channel in operation.

Sludge Dewatering:

- 1. One(1) 81m3 sludge storage tank and one (1) recirculation pump at 33m3/h at 117 kpa.
- Two (2) centrifuge feed pumps (one standby), each with Peak Flow Rate of 62 m3/h; one
 (1) centrifuge with an approximate capacity of 883 kg/h dry solids;
- 3. Emulsion polymer system and two (2) polymer feed pumps;
- 4. Two (2) screw conveyors in series to transfer dewatered sludge to hopper or truck; and
- 5. Centrate return pipe to aerated grit tanks.

Odour Control System:

1. A bio filter treatment system receives foul air from a number of locations at the plant, with a total design air flow of 9,175 m3/h and bio filter media volume of 76.1 m3 and 7.5 kW blower.

Effluent Water Supply:

Two (2) centrifugal pumps and two (2) motorized rotary strainers.

Flow Measurement:

- 1. Parshall flume in the secondary clarifier effluent channel including ultrasonic level indicators and transmitters.
- 2. Parshall flume in the secondary treatment bypass channel including ultrasonic level indicators and transmitters.

Final Effluent Sewer:

1,800 mm diameter sewer from effluent chamber to the Detroit River and other controls, piping, valves, drains, and appurtenances essential for the proper operation of the aforementioned sewage works.

Pump Station #2

Current works at the pump station

- one (1) coarse screen;
- two (2) dry-pit pumps with variable speed drives and each rated at 135 L/s at 20m TDH;
- 350 mm diameter force main to the head works;
- 600 mm diameter effluent sewer from treatment works to pump station No. 2 effluent chamber, and
- one (1) 200 kW diesel engine generator set.
- three (3) storm pumps each rated at 412 L/s at 4.3 m TDH, discharge to the storm water/treated water chamber and outlets through a gravity pipe to the Detroit River;

Proposed works of the pump station

- one (I) basket screen;
- combined sewage wet well consisting of three (3) compartments, measuring 5.2 m long by 4.5 m wide, 3.3 m long by 2.5 m wide, and 1.6 m long by 2.5 m wide;
- three (3) new raw sewage pumps: two (2) pumps rated for 252 L/s at 24m Total Dynamic Head

- (TDH), and one (1) pump rated for 112 L/s at 19m TDH;
- 400 mm diameter, connected to a 600 mm diameter forcemain, to the WWTP headworks;
- 900 mm diameter final effluent sewer from the treatment works to the effluent chamber (located at pump station No. 2); and
- one (I)300 kW diesel engine generator set (to be registered in the Environmental Activity and Sector Registry).
- three (3) storm pumps each rated at 412 L/s at 43 m TDH, discharge to the storm water/treated water
 chamber and outlets through a gravity pipe to the Detroit River;
- Edgewater Beach Wastewater Lagoons: a three cell waste stabilization lagoon system with seasonal discharge to the Detroit River, and wastewater pumping stations.
- McGregor Wastewater Treatment Lagoons: Three cell waste aerated stabilization lagoon system with phosphorous removal (alum system) with 4 intermittent sand filters and wastewater pumping stations diesel generator set and fuel storage tank.
- McLeod Sewage Treatment Plant: Sequential Batch Reactor (SBR) wastewater treatment facility, screening and grit removal, aerated sludge holding tank, phosphorus removal, continuous use of alum, nitrification, continuous discharge and effluent UV Disinfection, diesel generator standby power and wastewater pumping stations.
- <u>Big Creek Marsh Sewage Treatment Plant</u>: Rotary Biological Contactor (RBC) wastewater treatment facility with phosphorus removal, use of aluminum sulphate, effluent filtration, continuous discharge, UV Disinfection, trailer mounted portable diesel generator and wastewater pump stations.
- Boblo Island Sewage Treatment Plant: One fixed film rotating biological contactor
 unit, with primary settling tank rotating biological disk, secondary clarifier, buoyant up
 flow gravity filter and ultraviolet effluent disinfection treated effluent with phosphorus
 removal, use of aluminum sulphate, continuous discharge, and wastewater pump stations.

Part 2. Street Address of the Facilities

The street address of the Facilities is as follows:

Town Named Sites	Physical Address
Amherstburg Service Area	
Amherstburg WWT Plant	
Pumping Station Site 1	496 Sandwich St. S.
	105 Pickering Dr (Adjacent to Mark's Work
Pumping Station Site 2	Warehouse)
Pumping Station Site 3	627 Sandwich St S
Pumping Station Site 4	415 Front Rd N

Pumping Station Site 5 572 Essex County Rd 5
Pumping Station Site 6 58 Knob Hill Dr

Pumping Station Site 7 523 Welsh East Ave

Pump Stations Site Z3, Z4 42 Alma St. W (also services 6 Laird St)

Pump Station 31 Martin

Crescent

McGregor Service Area

McGregor WWT Lagoons 9420 Essex County Rd 11
Pumping Station Site 9 9462 Essex County Rd 11
Pumping Station Site 10 12006 12th Conc. & Felicia

Pumping Station Site 11 7088 Eagle Cres.
Pumping Station Site 12 41 Parkside Dr.

McLeod Service Area

McLeod STP Site 13 458 McLeod Ave Pumping Station Site 14 1835 Erie Ave

Pumping Station Site 16A 1551 Essex County Road #20

Pumping Station Site 15 187 Lakewood Ave Pumping Station Site 16 51 Willow Beach Rd

Big Creek Service Area

Big Creek Marsh Plant Site 17 187 Lakeside Dr Pumping Station Site 18 374 Lakeside Dr Meyers Pump Station Site 18A 175 Lakeside Dr

Boblo Island Service Area

Boblo Island R.B.C. Plant Site 19 2 Boblo Island Blvd.
West Side Pumping Station Site 20 140 Boblo Island Blvd.

Edgewater Beach Service Area

Edgewater Beach Lagoons Site 21 1063 Essex County Rd 20 - Conc. 1, Part Lot

21

Pumping Station Site 22 1063 Essex County Rd 20

Pumping Station Site 23 48 Dot Canal St

Pumping Station Site 24 1226 Essex County Rd 20 Pumping Station Site 25 10 Essex County Rd Pumping Station Site 26 722 Front Rd N

Pumping Station Site 27

Pumping Station Site 28

Pumping Station Site 28

Pumping Station Site 29

511 Essex County Rd 10

KP1 Kingsbridge Dr

255 South Riverview Rd

Meyers Pump Stations in the Edgewater Beach Service Area

Site 30-A 6 Wolf Island Site 30-B 7 Wolf Island

Site 30-C	8 Wolf Island
Site 30-D	9 Wolf Island
Site 30-E	10 Canal St
Site 30-F	12 Canal St
Site 30-G	14 Canal St
Site 30-H	16 Canal St
Site 30-I	1170 Dot St
Site 30-J	14 Centre St
Site 30-K	15 Centre St
Site 30-L	16 Centre St
Site 30-M	19 Centre St
Site 30-N	23 Centre St
Site 30-O	26 Centre St
Site 30-P	36 Centre St
Site 30-Q	3 Shangrila
Site 30-R	4 Shangrila
Site 30-S	8 Shangrila
Site 30-T	18 Shangrila
Site 30-U	24 Shangrila
Site 30-V	25 Shangrila
Site 30-W	28 Shangrila
Site 30-X	30 Shangrila
Site 30-Y	32 Shangrila
Site 30-Z	33 Shangrila
Site 30-Z1	36 Shangrila
Site 30-Z2	596 Front Rd N
Site 30	5 Wolf Island

SCHEDULE B - Definitions

In this Agreement, the following terms are defined below or in the section in which they first appear:

- "Agreement" means this agreement together with Schedules A, B, C, D, E, F, G, H, I, J and K attached hereto and all amendments made hereto by written agreement between OCWA and the Client.
- "Annual Price" is defined in Section 1 under Schedule D of this Agreement.
- "Applicable Laws" means any and all statutes, by-laws, regulations, permits, approvals, standards, guidelines, certificates of approval, licences, judgments, orders, injunctions, authorizations, directives, whether federal, provincial or municipal including, but not limited to all laws relating to occupational health and safety matters, fire prevention and protection, health protection and promotion, land use planning, environment, Building Code, or workers' compensation matters and includes Environmental Laws.
- "Approved Major Maintenance Expenditures" is defined in Paragraph 4.7(b) of this Agreement.
- "Approved Minor Maintenance Expenditures" if defined in Paragraph 4.6(e) of this Agreement.
- "Authorizations" means any by-laws, licences, certificates of approval, permits, consents and other authorizations or approvals required under Applicable Laws from time to time in order to operate the Facilities.
- "Authorized Representative(s)" is defined in Section 2.4 of this Agreement.
- "Business Days" means a day other than a Saturday, Sunday or statutory holiday in Ontario. The recognized Holidays are, New Year's Day, Family Day, Good Friday, Easter Monday, Victoria Day, Canada Day, Civic Holiday, Labour Day, Thanksgiving Day, Remembrance Day, Christmas and Boxing Day.
- "Business Hours" means the hours between 7:30 a.m. and 5:00 p.m. on a Business Day.
- "Capital Projects" is defined in Section 4.8(a) of this Agreement.
- "Change in Applicable Laws" means the enactment, adoption, promulgation, modification, issuance, repeal or amendment of any Applicable Laws that occur after the date this Agreement is executed by both Parties.
- "Change Order" means the document shown in Schedule "I" describing the changes to the Agreement agreed to by both parties.

- "Claim" means any claim, fine, penalty, liability, damages, loss and judgments (including but not limited to, costs and expenses incidental thereto).
- "Crown" means Her Majesty the Queen in Right of Ontario.
- "Drinking Water Quality Management Standard (DWQMS)" means the standard that sets out the minimum requirements for the operation of a drinking water system.
- "Effective Date" is defined on Page 1 of this Agreement.
- "Environmental Laws" means, any and all statutes, by-laws, regulations, permits, approvals, certificates of approval, licences, judgments, orders, judicial decisions, injunctions, and authorizations related to environmental matters or occupational health and safety and which are applicable to the operation of water and wastewater treatment facilities.
- "ESA" means the Electrical Safety Authority.
- "Facilities" is defined in Paragraph (b) of the Recitals to this Agreement and further described in Schedule A.
- "Hydro Costs" means hydroelectricity costs due to the operation and maintenance of the Facilities.
- "Indemnified Parties" is defined in Paragraph 3.3(a) of this Agreement.
- "Indemnifying Party" means the Party responsible for dealing with any Claims and paying out any Claims.
- "Initial Term" is defined in Section 4.1 of this Agreement.
- "Insurance" is defined in Paragraph 2.7(a) and further described in Schedule E.
- "Intellectual Property Rights" means any copyright, trademark, patent, registered design, design right, topography right, service mark, application to register any of the aforementioned rights, trade secret, rights in unpatented know-how, right of confidence and any other intellectual or industrial property rights of any nature whatsoever in any part of the world.
- "Major Maintenance Expenditures" is defined in Paragraph 4.7(a) of this Agreement.
- "Minor Maintenance Expenditures" is defined in Paragraph 4.6 (a) of this Agreement.
- "MOECC" means the (Ontario) Ministry of the Environment and Climate Change.
- "MOL" means the (Ontario) Ministry of Labour.

- "OHSA" means the Occupational Health and Safety Act, R.S.O. 1990, c. O.1.
- "Optional Services" means any services not included in the Annual Price that the Client and OCWA agree in writing to designate as "Optional Services" subject to Section 4.13.
- "Outpost 5" means a remote monitoring and control system designed and constructed by OCWA and its consultants for the purpose of monitoring and controlling processes at water treatment facilities and their related parts.
- "Overall Responsible Operator" means the person who will act as the overall responsible operator pursuant to Section 23 of O. Reg. 128/04 under the Safe Drinking Water Act, 2002 (the "SDWA") and Section 15 of O. Reg. 129/04 under the Ontario Water Resources Act (the "OWRA") in respect of the Facilities.
- "OWRA" means the Ontario Water Resources Act, R.S.O. 1990.
- "Parties" is defined in Paragraph (d) of the Recitals to the Agreement.
- "PDM" or "Process Data Management" means technology that allows process data to be entered into a format that can be viewed, manipulated and retrieved in the form of customized reports.
- "Pre-existing Condition" is defined in Section 2.5 of this Agreement.
- "Renewal Term" is defined in Section 4.1 of this Agreement.
- "Routine Maintenance" means regular and/or repetitive activities recommended by the equipment or facility manufacturer or practices of a prudent operator to maintain the reasonably expected service life of the equipment and components thereof and includes preventative maintenance.
- "SCADA" means Supervisory Control and Data Acquisition.
- "SDWA" means the Safe Drinking Water Act, 2002, S.O. 2002 c.32.
- "Service Fee" is defined and described in Schedule D.
- "Services" is defined in Section 2.1 of this Agreement.
- "Technology" is defined in Section 7.1 of this Agreement.
- "Uncontrollable Circumstance" is defined in Paragraph 2.2(c) of this Agreement.
- "Unexpected Expenses" is defined in Paragraph 4.9(a) of this Agreement.
- "Utility Costs" means the costs of natural gas used in the operation of the Facilities.

"WMMS" or "Work Management Maintenance System" means a computer program used to determine a program of preventive maintenance activities for equipment in a facility based on a risk analysis that considers factors such as equipment life expectancy, present value and replacement cost.

"Year" means the three hundred and sixty-five (365) day period from April 1st to March 31st of the following year. The Leap Years in 2016 and 2020 will not affect the Terms and Conditions of this Agreement.

SCHEDULE C - The Services

Part 1 - Services included in the Annual Price

The Services are set out below:

General Services Applicable to both Water and Wastewater Facilities

OCWA will provide the following services:

- 1. Staffing
- (a) Ensure the facilities are operated with certified operators and other trained staff as required by Environmental Laws.
- (b) Ensure that staff working at the facilities are trained in normal process operation and maintenance of the facilities and that all staff are trained to deal with emergency situations.
- (c) Provide all necessary training and continuing education for staff to ensure the continued operation of the Facilities, in accordance with all Applicable Laws, including the Accessibility for Ontarians with Disabilities training as per Reg. 429/07.

Emergency Situations

- Ensure that there are contingency plans in place for OCWA staff to address non-routine operational situations and emergency situations such as spills, by-passes, overflows, hydro interruptions and equipment failure.
- ii. Prepare and revise, as necessary, an Emergency Plan for the Facilities consistent with the requirements of the Applicable Laws and the Client's Emergency Plans;
- iii. In the event of an emergency, OCWA shall implement such contingency plans and shall make all reasonable efforts to maintain the Facilities in compliance with Environmental Laws.
- iv. OCWA will provide effective first response to after hour emergencies/call outs related solely to the Client's Facilities. Call outs of less than one (1) hour in duration will not be charged to the Client with the exception of the Meyers Pump Stations, Alma St. Stations, and new Wastewater Treatment Facilities;
- v. Call-outs between the hours of 07:30 16:00 will not be charged to the Client with the exception of extraordinary circumstances;
- vi. Assist with the repair of water mains and sewer lines;

- vii. OCWA will supply certified operators to respond to emergency conditions in respect of the operation of the Facilities.
- viii. Emergency responses outside of regular work hours shall be billed to the Client.
 - 1. Regulatory Matters
 - (a) Prepare the facilities for any scheduled inspection by the MOECC and shall accompany the MOECC during such inspection. OCWA will review with the Town any inspection reports prepared by regulatory authorities that are provided to OCWA.
 - (b) Respond to a regulatory report on behalf of the Town (i.e. MOECC or MOL) either directly or indirectly shall be considered an expected expense. OCWA will either correct deficiencies identified in such inspection or negotiate changes to the reports with the regulatory authorities if related to the operation of the facilities. If any orders are issued by a regulatory authority which will require Capital Expenditures or any additional services, then OCWA may negotiate with the Town to provide such services at an additional cost to be agreed upon by the Parties.
 - (c) Report to the Town and the MOECC non-compliance with a regulatory requirement;
 - 2. Reporting

Provide a facilities performance report within forty-five (45) days of the completion of each quarter or such other period as the Client and OCWA may agree upon.

- 2. Efficient Operation/Record Keeping
- (a) OCWA is responsible for ensuring the efficient operation of the Facility's processes.
- (b) OCWA will maintain records regarding the operation of the Facility in compliance with Environmental Laws.
- Operations Manuals
- (a) recommend to the Client, any section in the operating manuals that should be modified/changed to ensure that the operating manuals reflect the actual or revised approach to operating the Facilities; which recommendations may require third party assistance.
- 4. Initial & Final Condition Reports
- (a) develop and maintain an inventory of the Town's original equipment tools and attractables in place as of the effective date of the Agreement;

- (b) through an independent third party, conduct an Initial and Final Condition Survey report of assets.
- (c) Meet with the Town to review both Initial and Final Condition Survey reports.

5. Capital Improvements

Record information on the frequency of equipment breakdown and repair costs to determine replacement needs. Parts of the facility requiring upgrading or improvement will be identified and brought to the attention of the Town.

6. Change In Laws

(a) notify the Client of any modifications or changes to the Services or the Facilities required to comply with any Change in Laws and subject to Client approval make the required modifications or changes at an additional cost.

7. General

- (a) Utilize computerized work orders and input into a computerized maintenance management system;
- (b) Maintaining and updating contingency plans and WHMIS data;
- (c) provide security at the Facilities by maintaining the existing fences and gates and locking same and notifying the Client of the need for any repairs.
- (d) Operate equipment as required to maintain process in compliance;
- (e) Adhere to all applicable policies, guidelines and regulations;
- (f) Comply with and adhere to established operating procedures and schedules for the facilities, particularly those established for emergency situation;
- (g) cleaning and janitorial functions for all facilities are the responsibility of OCWA including all required cleaning and paper products;
- (h) good housekeeping to maintain a safe work environment;
- (i) clean all equipment, floors, etc. in order to maintain a safe working environment
- (j) guiding visitors through the facility;
- (k) notify client or health and safety representatives of any concerns regarding the repair or safe operation of equipment;

- (1) working with and/or liaison with contractors and repair shops for repairs which cannot be done on site or by on-site personnel
- (m)maintaining an account or inventory of material at hand, parts and materials used, and ordering replacements from suppliers, as required
- (n) preparing work orders according to established procedures, and creating detailed reports on all repairs conducted in order to create a performance history, and in accordance with health and safety requirements
- (o) adapting and modifying newly purchased equipment, pumps, motors, systems or part to in-plant specifications, fabricating parts from sketches and blueprints, or according to repair requirements;
- (p) noting and advising client of the reasons for malfunctions, making recommendations and/or implementing changes to processes to improve facility's operations;
- (q) noting, recording and filing all readings of data, flows, chemicals used, actions
 performed, etc., to assist in creating an operating history of the facility, and to be used in
 planning and costing the operations;
- (r) checking all equipment for signs of wear, noting as to whether corrective action is required, cleaning and lubricating in accordance with manufacturer's specification, established operating procedures, or as required;
- (s) mixing chemicals and adding to the process in accordance with standard operating procedures, or as dictated by the quality of the wastewater or water;
- (t) Performing extensive on-site break down repair and/or replacement of equipment after complete failure, determining priorities, time frames, costs and resource requirements for the job, coordinating available staff and equipment from within the facility, arranging for rental equipment if required and ensuring it is on site prior to starting to work, making adjustments to facility process in order to compensate for equipment being out of service;
- (u) Repairing, clearing of debris and/or replacing facility equipment or parts which may, for example, be fouled, show signs of wear, may be leaking, or are broken down and which may require basic knowledge of and skill in such trades as millwright, welding, plumbing (copper, steel and plastic), basic electrical work (e.g. replacing wiring, switches, breakers, etc.) or work on hydraulic, electrical and gas/diesel pumping systems;
- (v) Performing scheduled or planned maintenance on the equipment and processes in accordance with established routines, preventative maintenance program, performance history or manufacturer's recommendations; recording all operating and maintenance data;

8. Grounds Maintenance

Snow accumulation and salting of the facilities' parking lots will be managed by OCWA. OCWA will also be responsible for summer yard maintenance at the WWTP.

A. Water Treatment

- (a) Ensure that daily operations comply with Environmental Laws and ensure that daily operations comply with and fulfill the requirements of all PTTW and DWWP for the facility;
- (b) Monitor all facility processes through visual inspections by using by taking reading from the process control equipment in order to make any adjustments to the equipment and processes which will ensure the efficient operation of the facilities;
- (c) Inspect process control equipment to ensure proper operation water treatment pumps, alum and other chemical feeders;
- (d) Check filters and backwashing on a routine basis;
- (e) Mix, monitor and adjust process chemicals to ensure adequate treatment;
- (f) Record and analyze water flow, chemicals used, chlorine residuals, turbidity and other process readings as required;
- (g) Routinely conduct water sampling/testing in accordance with Environmental Laws, including the Municipal Drinking Water Works Permit.
- (h) Complete OCWA's internal operational data forms for statistical input into PDM;
- (i) Calibrate equipment in accordance with the Municipal drinking Water License and Drinking Water Works Permit;
- (j) Collect water samples from the distribution system as set out in Schedule K and record chlorine residuals as currently required by Ontario Regulation 170/03;
- (k) Check low lift pumping station to ensure that everything is in order including taking routine readings;
- (1) Operate pump controls and valve controls for pumping of all process streams;
- (m) Hose down weirs, walls and channels of all process streams;
- (n) Receive and handle chemicals and mix all chemicals in a liquid feed system;

(o) Work with the Town to encourage a water conservation program such as water meter, water efficient showerheads and toilettes, wise use of water and promotional activities, promote and facilitate tours.

B. Water Distribution

- 1. Ensure that daily operations comply with ad fulfil the requirements of Environmental Laws;
- 2. Inspect equipment, towers, and sampling stations to ensure proper operation;
- 3. Leak detection monitoring of tower, and ground water reservoirs for levels and pressures;
- Routinely conduct water sampling/testing in accordance with Environmental Laws, including the Municipal Drinking Water Works Permit.
- 5. Collect water samples from the distribution system as set out in Schedule K and record chlorine residuals as currently required by Ontario Regulation 170/03;
- 6. Complete OCWA's internal operational data forms for statistical input into PDM;
- 7. Calibrate equipment in accordance with the Municipal drinking Water License and Drinking Water Works Permit;
- 8. Lead sampling program as specified in Reg. 170/03

DWOMS Assistance (Town's WDS)

- 1. Prepare and conduct on-site (annual) internal audit
- 2. Prepare internal audit report.
- 3. Review internal audit report with the Town and assist with the implementation of identified action items (opportunities for improvement, OFI's and/or con-conformances)
- 4. Schedule and assist the Town during the Management Review.
- 5. Conduct the annual review of Operation Plan and prepare for external auditor.
- Conduct risk assessments.
- 7. Co-ordinate and manage all issues pertaining to third party external audits.

Wastewater Treatment

- Inspect process control equipment to ensure proper operation of wastewater treatment pumps, blower and aeration systems, alum and other chemical feeders;
- ii. Performing scheduled or planned maintenance on the equipment and processes in accordance with established routines, preventative maintenance program, performance history or manufacturer's recommendations; recording all operating and maintenance data;
- iii. Monitor all facility processes through visual inspections by using the computerized SCADA system, or by taking reading from the process control equipment in order to make any adjustments to the equipment and processes which will ensure the efficient operation of the facilities;
- iv. Remove grit as required;
- v. OCWA staff will on a routine basis:
 - a. monitor and adjust dosages of process chemical as required;
 - b. check filters;
 - c. record and analyze chemicals used, chlorine residuals, disinfection, process water and wastewater flow calculations;
 - d. collect samples and perform routine wastewater tests in accordance with the Certificate of Approval or legislation and in accordance with Schedule K, Sampling Schedule;
- vi. Calculate, record and analyze the amount of wastewater treated, the daily flows and monthly flows, pumping station run hours, and standby equipment running hours;
- vii. Complete OCWA's internal operational data forms for statistical input into PDM;
- viii. Calibrate equipment in accordance with the Facilities' ECA;
- ix. Hose down weirs, walls and channels of all process streams;
- x. Receive and handle chemicals and mix all chemicals in a liquid feed system;
- xi. Maintain the facility, tools and equipment in a clean and orderly state, cleaning various spills, painting when required;
- xii. Checking all health and safety equipment, ensuring all tools are in working order, and complying with legislated and local health and safety requirements;
- xiii. OIC responsibilities

B. Wastewater Collection

- i. Ensure that daily operations comply with Environmental Laws;
- ii. Inspect equipment at pumping stations to ensure proper operation of bar screens, pumps, standby power and other chemical feeders;
- iii. Record flow readings on operational forms for computer input;
- iv. Calibrate equipment in accordance with the facilities ECA;
- v. Clean wet wells twice annually (Spring and Fall)

Meyers Pump Stations (29 locations & 2 Alma St. Stations)

- i. labour costs incurred for the maintenance of the Meyers Pumps are included;
- ii. Replacement costs and/or tank cleaning related to the Myers Pumps will be invoiced to the Town.

C. Wastewater Treatment Lagoons

- i. Ensure that daily operations comply with Environmental Laws; ensure that daily operations comply with and fulfill the requirements of all ECA's for each facility.
- ii. Inspect equipment at the lagoon to ensure proper operation of pumps, aeration systems, filters, and other chemical feeders;
- iii. Monitor and adjust dosages of process chemicals as required;
- iv. Inspect wastewater lagoon routinely to monitor levels and conditions and inspect berms for erosion and rodent control;
- Record flow readings on operational forms for computer input;
- vi. Conduct sampling as defined in the Facilities' ECA or applicable legislation and as per Schedule K;
- vii. Calibrate equipment in accordance with the Facilities' ECA.

Storm Water Stations

i. Perform a weekly check of each station to ensure proper operation

D. Force mains

i. Monitor force mains as required;

Sludge

- i. The Town acknowledges and agrees that the Client is responsible for arranging for all aspects of sludge removal, storage and spreading and is required to comply with all relevant Environmental Laws, including but not limited to, the *Nutrient Management Act*, 2002 and its regulations as they may be amended from time to time, any relevant regulatory guidelines on biosolids management and disposal issued by the Ministry of the Environment and any applicable certificates of approval.
- ii. As owner of the Facilities, the Client acknowledges that it shall be the Client's responsibility to meet the requirements of the NMA regarding preparation and submission of a nutrient management strategy; such requirement is being phased in depending upon the size of the Facilities. OCWA may be able to provide assistance in the preparation of the strategy upon the Client's request and the Parties' agreement on the scope of the work and price.
- iii. Future NMA requirements also affect sludge haulers with respect to certification. The Client acknowledges that these "new" NMA requirements may affect the price of sludge haulage and therefore would be considered a change in Applicable Laws under Paragraph 4.7(b).

Part 2 - Optional Services (To Be Provided at the Request of the Client)

OCWA may provide additional services to the Client including but not limited to the Optional Services set out below:

- 1. Operation Related Services
- (a) maintenance and repair of sewage collection system, including but not limited to, smoke/dye testing, manhole inspections, rodding, CCTV inspections, and tree root removal/treatments:
- (b) sewer system locates as set out by applicable legislation and Ontario One Call;
- (c) new sewer service installation or connection inspection;
- (d) contract repair for sewer line breaks including road restoration;
- (e) inspection of repaired sewer services;
- (f) inspect and flush sanitary collection system, including sewers, manholes and clean outs;
- (g) high pressure sewer flushing;
- (h) acoustic pipe inspection;
- (i) infiltration surveys, sewer cameraing;
- (j) adjust and leveling manholes;
- (k) biosolids removal from lagoon;

- (1) lagoon depth monitoring;
- odour control system. (m)
- Capital Projects Plans 2.
- (a) prepare a detailed Capital Projects Plan for the facility(ies).
- 3. **Engineering Services**
- engineering services; financial plans. (a)
- (b)
- Information Technology Services 4.
- SCADA development and maintenance. (a)

SCHEDULE D - The Annual Price And Other Charges

1. Annual Price for the Initial Term

In accordance with Section 4.2 and subject to any adjustments made pursuant to other provisions of this Agreement, the Client shall pay OCWA a price for the Services for each Year of the Initial Term in the following amounts (the "Annual Price"):

For Year One: \$1,853,916.52 For Year Two: \$1,698,326.90 For Year Three: \$1,676,248.67 For Year Four: \$1,696,363.64 For Year Five: \$1,716,720.00

The Annual Price includes the OCWA Fixed Fee and Reconcilable Costs. The annual cost and monthly billing for each year of the initial term of the Agreement are as follows;

Year One - April 1, 2016 to March 31, 2017

Facility	Fixed Costs	Reconcilable Costs	Total	Monthly Billing
McGregor Wastewater Plant	\$153,023.97	\$12,744.00	\$165,767.97	\$13,814.00
McLeod Wastewater Plant	\$178,717.34	\$8,142.00	\$186,859.34	\$15,571.61
Big Creek Wastewater Plant	\$117,728.86	\$1,593.00	\$119,321.86	\$9,943.49
Edgewater Wastewater Treatment Plant	\$171,456.84	\$295.00	\$171,751.84	\$14,312.65
Boblo Wastewater Treatment Plant	\$93,207.28	\$1,770.00	\$94,977.28	\$7,914.77
Amherstburg Wastewater Treatment Plant	\$366,800.20	\$44,840.00	\$411,640.20	\$34,303.35
Amherstburg Water Treatment Plant	\$646,368.03	\$57,230.00	\$703,598.03	\$58,633.17
Total	\$1,727,302.52	\$126,614.00	\$1,853,916.52	\$154,493.04

Year Two - April 1, 2017 to March 31, 2018

Facility	Fixed Costs	Reconcilable Costs	Total	Monthly Billing
McGregor Wastewater Plant	\$150,499.08	\$12,533.72	\$163,032.80	\$13,586.07
McLeod Wastewater Plant	\$175,768.50	\$8,007.66	\$183,776.16	\$15,314.68
Big Creek Wastewater Plant	\$115,786.33	\$1,566.72	\$117,353.05	\$9,779.42
Edgewater Wastewater Treatment Plant	\$168,627.80	\$290.13	\$168,917.93	\$14,076.49
Boblo Wastewater Treatment Plant	\$91,669.36	\$1,740.80	\$93,410.16	\$7,784.18
Amherstburg Wastewater Treatment Plant	\$298,247.99	\$44,100.14	\$342,348.13	\$28,529.01
Amherstburg Water Treatment Plant	\$573,202.96	\$56,285.71	\$629,488.67	\$52,457.39
Total	\$1,573,802.02	\$124,524.88	\$1,698,326.90	\$141,527.24

Year Three - April 1, 2018 to March 31, 2019

Facility	Fixed Costs	Reconcilable Costs	Total	Monthly Billing
McGregor Wastewater Plant	\$148,542.59	\$12,370.79	\$160,913.38	\$13,409.45
McLeod Wastewater Plant	\$173,483.51	\$7,903.56	\$181,387.07	\$15,115.59
Big Creek Wastewater Plant	\$114,281.12	\$1,546.35	\$115,827.47	\$9,652.29
Edgewater Wastewater Treatment Plant	\$166,435.64	\$286.36	\$166,722.00	\$13,893 50
Boblo Wastewater Treatment Plant	\$90,477.66	\$1,718.16	\$92,195.82	\$7,682.99
Amherstburg Wastewater Treatment Plant	\$294,370.77	\$43,526.84	\$337,897.61	\$28,158 13
Amherstburg Water Treatment Plant	\$565,751.33	\$55,553.99	\$621,305.32	\$51,775.44
Total	\$1,553,342.62	\$122,906.05	\$1,676,248.67	\$139,687.39

Year Four - April 1, 2019 to March 31, 2020

Facility	Fixed Costs	Reconcilable Costs	Total	Monthly Billing
McGregor Wastewater Plant	\$150,325.10	\$12,519.24	\$162,844.34	\$13,570.36
McLeod Wastewater Plant	\$175,565.32	\$7,998.40	\$183,563.72	\$15,296.98
Big Creek Wastewater Plant	\$115,652.48	\$1,564.90	\$117,217.38	\$9,768.12
Edgewater Wastewater Treatment Plant	\$168,432.87	\$289.80	\$168,722.67	\$14,060.22
Boblo Wastewater Treatment Plant	\$91,563.39	\$1,738.78	\$93,302.17	\$7,775.18
Amherstburg Wastewater Treatment Plant	\$297,903.22	\$44,049.16	\$341,952.38	\$28,496.03
Amherstburg Water Treatment Plant	\$572,540.34	\$56,220.64	\$628,760.98	\$52,396.75
Total	\$1,571,982.72	\$124,380.92	\$1,696,363.64	\$141,363.64

Year Five - April 1, 2020 to March 31, 2021

Facility	Fixed Costs	Reconcilable Costs	Total	Monthly Billing
McGregor Wastewater Plant	\$152,129.01	\$12,669.47	\$164,798.48	\$13,733.21
McLeod Wastewater Plant	\$177,672.10	\$8,094.38	\$185,766.48	\$15,480.54
Big Creek Wastewater Plant	\$117,040.32	\$1,583.68	\$118,624.00	\$9,885.33
Edgewater Wastewater Treatment Plant	\$170,454.06	\$293.27	\$170,747.33	\$14,228.94
Boblo Wastewater Treatment Plant	\$92,662.14	\$1,759.65	\$94,421.79	\$7,868.48
Amherstburg Wastewater Treatment Plant	\$301,478.06	\$44,577.75	\$346,055.81	\$28,837.98
Amherstburg Water Treatment Plant	\$579,410.82	\$56,895.29	\$636,306.11	\$53,025.51
Total	\$1,590,846.51	\$125,873.49	\$1,716,720.00	\$143,060.00

HST Exempt – OCWA has been designated to be a municipality under Section 22 of Part VI of Schedule V of the Excise Tax Act. As a result the prices shown are HST Exempt.

Reconcilable Costs. Commodities such as chemical and diesel costs will be charged as reconcilable costs. No later than October 31st of each Year of the Initial Term, OCWA shall provide an estimate to the client for its approval of the charges associated with the commodities for the next financial Year. The Client will notify OCWA no later than December 31st whether the estimate is approved. If the Client does not provide OCWA a decision regarding approval by the December 31st date, the estimate will be deemed approved.

Payment of Reconcilable Costs. The Client shall pay the estimate on a monthly basis as part of the Fixed Cost payment. By April 15th of each Year the Agreement is in force, OCWA shall determine the actual charges for the commodities for the calendar year. If the estimate paid by the client exceeds the actual charges, OCWA will pay the Client the difference within thirty (30) days of OCWA making the determination. If the actual charges exceed the estimate paid by the Client; the Client will pay the difference within thirty (30) days of OCWA making the determination.

2. Transition Costs

The Initial Transition /Condition Survey cost of \$123,900 will be billed once the Report has been finalized and accepted by the Town. The Final Condition Survey cost of \$74,500 will billed once the final report has been received and accepted by the Town.

3. Optional Services

Unless otherwise agreed to in writing, fees for Optional Services which OCWA agrees to provide to the Client shall be billed directly to the Client on a time and materials basis at the following rates:

- (a) Labour rates on Business Days, Monday to Friday, (8:00 to 5:00) shall be billed at \$85.00/hour/person for an Operations Manager, Compliance Technician or UPIT, and \$60.00/hour/person for an Operator or Mechanic plus vehicle expenses at \$0.50/km/vehicle;
- (b) Labour rates after hours and on weekends shall be billed at \$127.50/hour/person for an Operations Manager, Compliance Technician or UPIT, and \$90.00/hour/person for an operator or mechanic with a minimum four (4) hour charge plus vehicle expenses at \$0.50/km/vehicle;
- (c) Labour rates on statutory holidays shall be billed at \$127.50/hour/person for an Operations Manager, Compliance Technician or UPIT, and \$90.00/hour/person for an operator or mechanic, with a minimum eight (8) hour charge plus vehicle expenses at \$0.50/km/vehicle;

- (d) The labour rates set out in paragraphs (a) (b) and (c) above are subject to increases which OCWA's applicable OPSEU employees may receive during the term of this Agreement. Any increase in the labour rates shall coincide with the start date of such increases, including any retroactive start dates, and OCWA will communicate any rate changes to the Town; and
- (e) Costs for parts, equipment and supplies, and outside labour charges (i.e., contractors), used by OCWA staff to provide the Optional Services shall be billed to the Client, and the Client will pay such costs together with a Service Fee.

4. Service Fee

"Service Fee" means an additional fee charged to the Client when OCWA purchases materials, supplies, equipment or contractor's services on behalf of the Client. For any individual item or service purchased, the Service Fee shall be 10%.

SCHEDULE E - Insurance

Automobile Insurance

Coverage: Automobile Liability for OCWA owned or leased vehicles.

Limit: \$5,000,000

Commercial General Liability Insurance

Coverage: Third party liability including legal fees, for property damage and/or bodily injury as caused by OCWA's negligence arising out of OCWA's operations of the Facilities.

Limit: \$10,000,000 per Occurrence.

Deductible: \$50,000 for the year 2016; subject to change on an annual basis.

Contractor's Pollution Liability/Professional Liability Insurance

Coverage: Professional Liability: To pay on behalf of OCWA sums which OCWA shall

become legally obligated to pay as damages and/or claims by reason of any act, error or omission in professional services rendered or that should have been rendered by OCWA, or by any person for whose acts errors or omissions OCWA is legally responsible, and arising out of the conduct of OCWA's profession. The policy shall remain in force for twelve (12) months following the termination of this agreement. The Town shall be named as an additional insured with respect to

the CPL and PL.

Pollution legal liability covering third party property damage and bodily injury and clean-up costs for pollution conditions arising out of the performance of the

services provided by OCWA.

Limit: \$10,000,000 per loss on a Claims Made basis with automatic, extended reporting periods for Pollution Liability. \$10,000,000 aggregate.

Limit: \$5,000,000 for Professional Liability Insurance

Deductible: \$100,000 for the year 2016; subject to change on an annual basis.

Certificate of Insurance

Prior to the execution of this agreement and upon the placement, renewal, amendment, or extension of all or any part of the insurance, OCWA shall within 30 days provide the Client with confirmation of coverage in the form of a Certificate of Insurance signed by an authorized representative of the insurer, showing the Client as an additional insured on the CGL and Pollution Liability policies.

SCHEDULE F - List of Pre-Existing Conditions

As per Paragraph 3.1(e) of this Agreement, the following Pre-existing Conditions have been identified:

To be developed upon completion of the initial condition survey report.

SCHEDULE G - Loadings

Part 1: Changes in Loadings as measured by Sludge Production (in kg)

(a) A significant change in Loadings (as measured by sludge production) means sludge production (kg) that is at least 10% greater or less than the Base Year Sludge Production.

"Base Year Sludge Production" means the annual average sludge production of the three years immediately preceding the commencement of the Initial Term or any Renewal Term, as may be applicable.

The AWWTP Base Year Sludge Production for the Initial Term is 859,919 kg per year.

Part 2: Calculation of Sludge Production Debit/Credit

A debit/credit amount equal to \$0.1 per kg of sludge produced greater than/less than the applicable Base Year Sludge Production for the wastewater treatment process will be levied based on a significant change in sludge production (as per Part 1 above).

The Loadings adjustment will only apply to the Amherstburg Wastewater Treatment Plant.

SCHEDULE H - Change Order Form



Change Order Form

Change Being	Requested				
Name of Chan	ige:				
Ontario Clear (OCWA)	Water Agency	Per:Name: Title:	D	ate (YYYY/MM/DD):	
Client		Per:Name: Title:	D	Date (YY YY/MM/DD):	
Adjustment	7-40				
Check Approp	riate Type of Change				
Apply (Y/N)	Type of Change:				
	Adjustment to Annua	al Price		*	
	Change to Service				
-	Impact			-11	-
Adjustment to	Annual Price				
Description –	Attach Additional Doc	umentation if Required			4.

Change in Ser	vices				
Description -	Attach Additional Doc	umentation if Required			
					-
					1.00
				2.00	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Cost Breakdo	wn for Change in Ser	vices			
Item			Quantity	One-time Cost	Annual Cost
		· · · · · · · · · · · · · · · · · · ·			
			Total Cost:		

SCHEDULE I - Expenditure Request and Approval to Proceed



Hub Name Hub Address City, ON Code

Phone: XXX-XXX-XXXX Fax: XXX-XXX-XXXX

PART 1

Facility Name:			
Project Name:			
Project Number:		Estimated Project Start Date	K
Total Estimated Cost of the Project:	\$	Detailed Quote Attached:	☐ Yes ☐ No
It is recognized that this is a budget estim final invoice price varies from the estimate		y vary. OCWA will provide additio	nal justification where the
Type of Project:			
☐ Maintenance Project ☐ Ou☐ Health & Safety	ut of Scope Work	☐ Contingency	☐ Emergency
Description of Project or Expenditure:			
Submission Prepared By:			
Name (Print)	Signature	1	Date
Authorized Representative for the Ont	tario Clean Water Agen	су	
PART 2 Approval to Proceed:			
☐ Approved ☐ Declined ☐	Deferred Reason	if Declined or Deferred	
The Ontario Clean Water Agency is autho estimate provided above. This may included the Municipality agrees to pay OCWA the Municipality's agreement with OCWA. Approved By:	de but not limited to the l	niring of sub-contractors, consultin	g firms, etc. as required.
Name (Print)	Signature		Date
Name (Print) Authorized Representative for the Mu			Date
Authorized Representative for the Mu			Date
Authorized Representative for the Mu			Date
Authorized Representative for the Mu PART 3 OCWA Internal Use Only:		Date:	Date
Authorized Representative for the Mu PART 3 OCWA Internal Use Only: Client PO / Project #:			Date
		Date:	Date

SCHEDULE J - Sampling Schedule

Water System Sampling

Sampling and Monitoring	Frequency
Raw Water	
Total Coliform, E.Coli	Weekly
Clostridium	Monthly
Backwash Water	
Total Suspendid Solids	Monthly
Free Chlorine Residual	Monthly
Aluminum	Monthly
Clarifier Blow Down	
Total Suspendid Solids	Monthly
Aluminum	Monthly
Free Chlorine Residual	Monthly
Treated Water	
Total Coliform, E. Coli, HPC	Weekly
Colour and Hardness	Monthly
Nitrate/Nitrite	Quarterly
Clostridium	Monthly
Schedule 23 & 24	Annual
NTA	Annual
Radionuclide	Monthly
Distribution System	
Free Chlorine Residual	3 x per week
Bacti.	Weekly
8 Total Coliform, E. Coli	Weekly
4 HPC	Weekly
Colour & Hardness	Monthly
Lead	Annual
Sodium & Flouride	Every 5 years
THM	Quartery

Wastewater System Sampling

Edgewater Lagoons

Raw Annual Average Daily Flow - 1,614m3/d

March 1 to June 15 (Discharge Period)

June 16 to Sept 15 (No Discharge) (Storage of Contents)

Sept 16 to Jan 15 (Discharge Period)

Jan 16 to March 1 (No Discharge) (Storage of Contents)

Sampling Frequencies (Raw Sewage)

(Minimum	4	hour	Compo	site)
/ TATTITITITITITITI	7	HOUL	COLLIDA	101007

Parameter	Type	Minimum Frequency
BOD ₅	Composite	Monthly
Total Suspended Solids	Composite	Monthly
Total Phosphorus	Composite	Monthly

Sampling Frequencies (Contents of Lagoon)

<u>Parameter</u>	<u>Type</u>	Minimum Frequency
CBOD ₅	Grab	Prior to Discharge
Total Suspended Solids	Grab	Prior to Discharge
Total Phosphorus	Grab	Prior to Discharge
Nitrogen (Ammonia + Ammonium)	Grab	Prior to Discharge
Total Kjeldahl Nitrogen	Grab	Prior to Discharge
pH	Grab/Probe	Prior to Discharge
Ecoli	Grab	Prior to Discharge
Dissolved Oxygen		, -

On-Site (If Odour is Present)

H₂S (If Odour is Present)

Grab/Probe

Prior to Discharge

Prior to Discharge

Sampling Frequencies (Final Effluent) this falls under Schedule D – Optional Services

1		***	
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Parameter	<u>Type</u>	Minimum Frequency
CBOD ₅	Grab	Twice per week
Total Suspended Solids	Grab	Twice per week
Total Phosphorus	Grab	Twice per week
Nitrogen (Ammonia + Ammonium)	Grab	Twice per week
Total Kjeldahl Nitrogen	Grab	Twice per week
Nitrite as N	Grab	Twice per week
Nitrate as N	Grab	Twice per week
H ₂ S (If Odour is Present)	Grab	Twice per week
E. Coli	Grab	Twice per week
Discolud Ovugan		

Dissolved Oxygen

On-Site (If Odour is Present) Grab/Probe Once every two weeks

• The temperature and pH of the effluent must be taken at the time of sampling for Total Ammonia Nitrogen to determine unionized ammonia.

Monthly Average Final Effluent (Do Not Exceed Monthly)

Effluent Parameter	<u>Concentration</u>	Loading	
March 1 to June 15			
CBOD ₅	30 mg/L	120 kg/d	
Suspended Solids	30 mg/L	120 kg/d	
Total Phosphorus	1 mg/L	4 kg/d	
Sept 16 to Jan 15			
CBOD₅	$30~\mathrm{mg/L}$	86 kg/d	
Suspended Solids	30 mg/L	86 kg/d	
Total Phosphorus	1 mg/L	3 kg/d	

- Must maintain Final Effluent pH no lower than 6.0 and no higher than 9.5 at all times.
- Effluent Concentrations and Waste Loadings for H2S, and Ammonia should not exceed concentrations that are rapidly lethal.

Reference Material

- Certificate of Approval #9390-7MFL53 issued on January 29, 2009.
- Ministry's procedure F-10-1 "Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works".

McGregor STP (Lagoons)

Raw Annual Average Daily Flow - 1,127m³/d

Sampling Frequencies (Raw Sewage)

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Sampling Frequencies (Final Effluent)

(Minimum 8 hour Composite)

<u>Type</u>	Minimum Frequency
Composite	Weekly
Grab	Weekly
Composite	Monthly
Composite	Monthly
Composite	Monthly
Grab	3 Times/Week
Grab	3 Times/Week
Grab	Monthly
	Composite Composite Composite Composite Composite Grab Composite Composite Composite Composite Composite Composite Composite

Monthly Average Final Effluent (Do Not Exceed Monthly)

Effluent Parameter	Concentration	<u>Loading</u>
CBOD ₅	10 mg/L	11.3 kg/d
Total Suspended Solids	10 mg/L	11.3 kg/d
Total Phosphorus		
Non-Freezing Period (May 1 to Nov. 30)	0.5 mg/L	0.56 kg/d
Freezing Period (Dec. 1 to April 30)	1.0 mg/L	1.13 kg/d
Total Ammonia Nitrogen		
Non-Freezing Period (May 1 to Nov. 30)	3 mg/L	3.4 kg/d
Freezing Period (Dec. 1 to April 30)	5 mg/L	5.6 kg/d
E. Coli	200/100 ml (Monthly	geometric mean density)

- Must maintain Final Effluent pH no lower than 6.0 and no higher than 9.5 at all times.
- The temperature and pH of the effluent must be taken at the time of sampling for Total Ammonia Nitrogen to determine unionized ammonia.

Operation and Maintenance

Effluent Parameter	Concentration	Loading
CBOD ₅	5 mg/L	5.08 kg/d
Total Suspended Solids	5 mg/L	5.08 kg/d
Total Phosphorus		
Non-Freezing Period (May 1 to Nov. 30)	0.3 mg/L	0.30 kg/d
Freezing Period (Dec. 1 to April 30)	0.5 mg/L	2.03 kg/d
Total Ammonia Nitrogen		
Non-Freezing Period (May 1 to Nov. 30)	2 mg/L	1.02 kg/d
Freezing Period (Dec. 1 to April 30)	4 mg/L	2.03 kg/d
Dissolved Oxygen	5 mg/L (Minimum Lev	rel)
E. Coli	100/100 ml (Monthly g	geometric mean density)

- Maintain Final Effluent pH no lower than 6.5 and no higher than 9.0 at all times.
- Operate the works within the rated capacity of the works.

Note: Operation and Maintenance is non-enforceable effluent quality objectives

Reference Material

- Certificate of Approval #9943-64NNH9 issued on January 11, 2005.
- Ministry's procedure F-10-1 "Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works".

McLeod STP (SBR)

Raw Annual Average Daily Flow – 1,015m³/d

Sampling Frequencies (Raw Sewage)

Minimum 24 hour Composite

<u>Parameter</u>	Type	Minimum Frequency
BOD ₅	Composite	Weekly
Suspended Solids	Composite	Weekly
Total Phosphorus	Composite	Weekly
Total Kjeldahl Nitrogen	Composite	Weekly

Sampling Frequencies (Final Effluent)

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IV	76	111			1.4	111 2111	.	omposite
	-			PATE T		ALC: UPA	~	OTTLOOPICO

Parameter	<u>Type</u>	Minimum Frequency
BOD ₅	Composite	Weekly
Suspended Solids	Composite	Weekly
Total Phosphorus	Composite	Weekly
Nitrogen (Ammonia + Ammonium)	Composite	Weekly
E. Coli	Grab	Weekly
Total Kjeldahl Nitrogen	Composite	Monthly
Nitrite as N	Composite	Monthly
Nitrate as N	Composite	Monthly
Dissolved Oxygen	Grab	Weekly
pH	Grab	Weekly
Temperature	Grab	Weekly

Sampling Frequencies (Sludges)

<u>Parameter</u>	<u>Type</u>	Minimum Frequency
Total Solids	Grab	Yearly
Total Phosphorus	Grab	Yearly
Metal Scan	Grab	Yearly

(Arsenic, Cadmium, Cobalt, Chromium, Copper, Lead, Mercury, Molybdenum, Nickel, Potassium, Selenium, Zinc)

Monthly Average Final Effluent (Do Not Exceed Monthly)

Effluent Parameter	Concentration	Loading
BOD ₅	10 mg/L	10.15 kg/d
Suspended Solids	10 mg/L	10.15 kg/d
Total Phosphorus	0.5 mg/L	0.51 kg/d
Nitrogen (Ammonia + Ammonium)		
Non-Freezing Period (May 1 to Nov. 31)	1.5 mg/L	1.52 kg/d
Freezing Period (Dec. 1 to April 30)	3 mg/L	3.05 kg/d
E. Coli	200/100 ml (Monthly	geometric mean density)

- Must maintain Final Effluent pH no lower than 6.0 and no higher than 9.5 at all times.
- Must continuously disinfect Final Effluent to maintain E. Coli concentration.

Operation and Maintenance

Effluent Parameter	Concentration	Loading
BOD_5	5 mg/L	5.08 kg/d
Suspended Solids	5 mg/L	5.08 kg/d
Total Phosphorus	0.3 mg/L	0.30 kg/d
Nitrogen (Ammonia + Ammonium)		
Non-Freezing Period (May 1 to Nov. 31)	1 mg/L	1.02 kg/d
Freezing Period (Dec. 1 to May 30)	2 mg/L	2.03 kg/d
Dissolved Oxygen	5mg/L (Minimum Level)	
E. Coli	150/100 ml (Monthly geometric mean density)	

Note: Operation and Maintenance is non-enforceable effluent quality objectives

Reference Material

- Certificate of Approval #7246-7GEJKQ issued on February 17, 2009.
- Ministry's procedure F-10-1 "Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works".

Amherstburg WPCP- "Existing Works"

Raw Annual Average Daily Flow - 7,770 m³/d

Chlorine addition (May 15 - Sept 15)

Sampling Frequencies (Raw Sewage)

(Minimum 24 hour Composite)

Parameter	Type	Minimum Frequency
BOD ₅	Composite	Monthly
Suspended Solids	Composite	Monthly
Total Phosphorus	Composite	Monthly

Sampling Frequencies (Final Effluent)

(Minimum 24 hour Composite)

Parameter	Type	Minimum Frequency
BOD ₅	Composite	Monthly
Suspended Solids	Composite	Monthly
Nitrogen (Ammonia + Ammonium)	Composite	Monthly
Total Kjeldahl Nitrogen	Composite	Monthly
Nitrite as N	Composite	Monthly
Nitrate as N	Composite	Monthly
E. Coli (May 15 – Sept 15)	Grab	Monthly
Total Cl ₂ Residual (May 15 – Sept 15)	Grab	Daily
Total Phosphorus	Grab	Twice per Month

Sampling Frequencies (Sludges)

<u>Parameter</u>	<u>Type</u>	Minimum Frequency
Total Solids	Grab	Yearly
Total Phosphorus	Grab	Yearly
Metal Scan	Grab	Yearly
(Arsenic, Cadmium, Cobalt, Chro	mium, Copper, Lead, M	Iercury, Molybdenum, Nickel, Potass
01. 7.)		

ssium,

Concentration

Selenium, Zinc)

Effluent Parameter

Monthly Average Final Effluent (Do Not Exceed Monthly)

BOD ₅ (30% Removal)	
Suspended Solids (50% Removal)	30 mg/L
Total Phosphorus	1 mg/L
Total Cl ₂ Residual (May 15 – Sept 15)	0.5 mg/L

Reference Material

- Ministry's procedure F-10-1 "Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works"
- Certificate of Approval #3-0642-80-816 issued on October 28, 1981

Amherstburg WPCP- "Proposed Works"

Raw Annual Average Daily Flow – 9,500 m³/d
Influent Screen/UV System (Both Channels) Peak Flow – 31,000 m³/d
UV System (One Channel) Peak Flow – 23,289 m³/d

Sampling Frequencies (Raw Sewage)

(24 hour Composite)

<u>Parameter</u>	Type	Minimum Frequency
BOD ₅	Composite	Monthly
Suspended Solids	Composite	Monthly
Total Phosphorus	Composite	Monthly
Total Kjeldahl Nitrogen	Composite	Monthly

Sampling Frequencies (Final Effluent)

(24 hour Composite)

Parameter	Type	Minimum Frequency
CBOD₅	Composite	Weekly
Suspended Solids	Composite	Weekly
Nitrogen (Ammonia + Ammonium)	Composite	Weekly
Total Phosphorus	Composite	Weekly
Total Kjeldahl Nitrogen	Composite	Monthly
Nitrite as N	Composite	Monthly
Nitrate as N	Composite	Monthly
E. Coli	Grab	Weekly
pH	Grab	Weekly
Temperature	Grab	Weekly
Unionized Ammonia	Calculated	Weekly

• The temperature and pH of the effluent must be taken at the time of sampling for Total Ammonia Nitrogen to determine unionized ammonia.

Sampling Frequencies (Sludges)

<u>Parameter</u>	Type	Minimum Frequency
Total Solids	Grab	Yearly
Total Phosphorus	Grab	Yearly
Metal Scan	Grab	Yearly

(Arsenic, Cadmium, Cobalt, Chromium, Copper, Lead, Mercury, Molybdenum, Nickel, Potassium,

Selenium, Zinc)

Monthly Average Final Effluent (Do Not Exceed Monthly)

Effluent Parameter	Concentration
CBOD ₅	15 mg/L
Suspended Solids	15 mg/L
Total Phosphorus	0.8 mg/L

Nitrogen (Ammonia + Ammonium)

Non-Freezing Period (May 1 to Nov. 30) 5 mg/L Freezing Period (Dec. 1 to April 30) 10 mg/L

E. Coli 200/100 ml (Monthly geometric mean density)

• Must maintain Final Effluent pH no lower than 6.0 and no higher than 9.5 at all times.

Effluent Objectives

Effluent Parameter CBOD₅ Concentration 10 mg/L

Suspended Solids 10 mg/L
Total Phosphorus 0.6 mg/L

Nitrogen (Ammonia + Ammonium)

Non-Freezing Period (May 1 to Nov. 30) 2 mg/L Freezing Period (Dec. 1 to April 30) 4 mg/L

E. Coli 100/100 ml (Monthly geometric mean density)

Note: Maintain pH of the effluent 6.5-8.5 inclusive at all times

Note: Effluent Quality Objectives is non-enforceable

Big Creek Marsh STP (RBC)

Raw Annual Average Daily Flow – 195m³/d Raw Peak Flow (Anytime) – 500m³/d

Sampling Frequencies (Raw Sewage)

Minimum 24 hour Composite

 $\begin{array}{cccc} \underline{Parameter} & \underline{Type} & \underline{Minimum\ Frequency} \\ BOD_5 & Composite & Weekly \\ Suspended\ Solids & Composite & Weekly \\ Total\ Phosphorus & Composite & Weekly \\ Total\ Kjeldahl\ Nitrogen & Composite & Weekly \\ \end{array}$

Sampling Frequencies (Final Effluent)

Minimum 24 hour Composite

<u>Parameter</u>	<u>Type</u>	Minimum Frequency
BOD ₅	Composite	Weekly
Suspended Solids	Composite	Weekly
Total Phosphorus	Composite	Weekly
Nitrogen (Ammonia + Ammonium)	Composite	Weekly
E. Coli	Grab	Weekly
Total Kjeldahl Nitrogen	Composite	Monthly
Nitrite as N	Composite	Monthly
Nitrate as N	Composite	Monthly
Dissolved Oxygen	Grab	Weekly
pH	Grab	Weekly
Temperature	Grab	Weekly

Sampling Frequencies (Sludges)

<u>Parameter</u>	Type	Minimum Frequency
Total Solids	Grab	Yearly
Total Phosphorus	Grab	Yearly
Metal Scan	Grab	Yearly

(Arsenic, Cadmium, Cobalt, Chromium, Copper, Lead, Mercury, Molybdenum, Nickel, Potassium, Selenium, Zinc)

Monthly Average Final Effluent (Do Not Exceed Monthly)

Effluent Parameter	Concentration	<u>Loading</u>
BOD ₅	10 mg/L	1.95 kg/d
Suspended Solids	10 mg/L	1.95 kg/d
Total Phosphorus	0.5 mg/L	0.098 kg/d
Nitrogen (Ammonia + Ammonium)		
Non-Freezing Period (May 1 to Nov. 31)	1.5 mg/L	0.30 kg/d
Freezing Period (Dec. 1 to April 30)	3 mg/L	0.60 kg/d
E. Coli	200/100 ml (Monthly	geometric mean density)

- Must maintain Final Effluent pH no lower than 6.0 and no higher than 9.5 at all times.
- Must continuously disinfect to maintain E. Coli concentration.

Operation and Maintenance

Effluent Parameter	Concentration	Loading
BOD ₅	5 mg/L	0.98 kg/d
Suspended Solids	5 mg/L	0.98 kg/d
Total Phosphorus	0.3 mg/L	0.06 kg/d
Nitrogen (Ammonia + Ammonium)		
Non-Freezing Period (May 1 to Nov. 31)	1 mg/L	0.20 kg/d
Freezing Period (Dec. 1 to May 30)	2 mg/L	0.40 kg/d
Dissolved Oxygen	5mg/L (Minimum Level)	
E. Coli	150/100 ml (Monthly geometric mean density)	

Note: Operation and Maintenance is non-enforceable effluent quality objectives

Reference Material

- Certificate of Approval #6109-7NWRPG issued on February 17, 2009.
- Ministry's procedure F-10-1 "Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works".

Boblo Island STP (RBC)

Raw Annual Average Daily Flow – 258.5m³/d Raw Peak Flow (Anytime) – 777.9m³/d

Sampling Frequencies (Raw Sewage)

Minimum 24 hour Composite

<u>Parameter</u>	<u>Type</u>	Minimum Frequency
BOD ₅	Composite	Monthly
Suspended Solids	Composite	Monthly
Total Phosphorus	Composite	Monthly
Total Kjeldahl Nitrogen	Composite	Monthly
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Sampling Frequencies (Final Effluent)

Minimum	24	hour	Com	posite

Parameter	<u>Type</u>	Minimum Frequency
BOD ₅	Composite	Weekly
Suspended Solids	Composite	Weekly
Total Phosphorus	Composite	Weekly
Nitrogen (Ammonia + Ammonium)	Composite	Weekly
E. Coli	Grab	Weekly
Total Kjeldahl Nitrogen	Composite	Monthly
Nitrite as N	Composite	Monthly
Nitrate as N	Composite	Monthly
pH (Mon-Fri)(On-Site)	Grab	3 Times/Month
Temperature (Mon-Fri) (On-Site)	Grab	3 Times/Month

Sampling Frequencies (Sludges)

<u>Parameter</u>	Type	Minimum Frequency
Total Solids	Grab	Yearly
Total Phosphorus	Grab	Yearly
Metal Scan	Grab	Yearly

(Arsenic, Cadmium, Cobalt, Chromium, Copper, Lead, Mercury, Molybdenum, Nickel, Potassium,

Selenium, Zinc)

Monthly Average Final Effluent (Do Not Exceed Monthly)

Effluent Parameter	Concentration
BOD ₅	15 mg/L
Suspended Solids	15 mg/L
Total Phosphorus	1.0 mg/L
Nitragan (Ammania + Amman)

Nitrogen (Ammonia + Ammonium)

Non-Freezing Period (May 1 to Nov. 31) 1.5 mg/L Freezing Period (Dec. 1 to April 30) 3 mg/L Total Chlorine Residual 0 mg/L

E. Coli 200/100 ml (Monthly geometric mean density)

- Must maintain Final Effluent pH no lower than 6.0 and no higher than 9.5 at all times.
- The temperature and pH of the effluent must be taken at the time of sampling for Total Ammonia Nitrogen to determine unionized ammonia.
- Must continuously disinfect to maintain E. Coli concentration.

Annual Average Final Effluent (Do Not Exceed Annually)

Effluent Parameter	Loading
BOD ₅	3.9 kg/d
Suspended Solids	3.9 kg/d
Total Phosphorus	0.26 kg/d

Nitrogen (Ammonia + Ammonium)

Non-Freezing Period (May 1 to Nov. 31) 0.39 kg/d Freezing Period (Dec. 1 to April 30) 0.78 kg/d

Design Average Daily Flow – 259.3 m³/d (Loading Calculation) (Annual Average) Any twelve consecutive months

Operation and Maintenance	<u>Annual</u>	
		Average
Effluent Parameter	Concentration	Loading
BOD ₅	10 mg/L	2.6 kg/d
Suspended Solids	10 mg/L	2.6 kg/d
Total Phosphorus	0.8 mg/L	0.21 kg/d
Nitrogen (Ammonia + Ammonium)		
Non-Freezing Period (May 1 to Nov. 31)	1.0 mg/L	0.26 kg/d
Freezing Period (Dec. 1 to May 30)	2.0 mg/L	0.52 kg/d
Total Chlorine Residual	0 mg/L	
E. Coli	150/100 ml (Monthly	geometric mean density)

Design Average Daily Flow – 259.3 m³/d (Loading Calculation) (Annual Average) Any twelve consecutive months

Note: Operation and Maintenance is non-enforceable effluent quality objectives

Reference Material

- Certificate of Approval #3-0212-97-006 issued on September 11, 1997.
- Ontario Ministry of the Environment's Procedure F-10-1 "Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works".