

CITY OF EDMONTON BYLAW 19627

EPCOR DRAINAGE SERVICES AND WASTEWATER TREATMENT BYLAW

THE CITY OF EDMONTON BYLAW 19627

EPCOR DRAINAGE SERVICES AND WASTEWATER TREATMENT BYLAW

Whereas, pursuant to section 3 of the *Municipal Government Act*, RSA 2000, c M-26, the purposes of a municipality are to provide services, facilities and other things that are necessary or desirable for all or a part of the municipality;

And whereas, pursuant to section 7 of the *Municipal Government Act*, Edmonton City Council may pass bylaws respecting public utilities;

Edmonton City Council enacts:

PURPOSE

- 1 The purpose of this bylaw is to approve:
 - (a) Rates, fees and charges for Drainage Services and Wastewater Treatment Services provided by EPCOR Water Services Inc. to Customers in the city of Edmonton and others, and a mechanism whereby such Rates will be adjusted on an annual basis, for the period of April 1, 2022 to March 31, 2025;
 - (b) Terms and Conditions for Drainage Services, and a mechanism whereby Drainage Services Guidelines consistent with the Terms and Conditions may be implemented by EPCOR Water Services Inc. and amended or replaced from time to time; and
 - (c) The Performance Based Regulation Plan for the period of April 1, 2022 March 31, 2025.

DEFINITIONS

- 2 In this bylaw, unless otherwise specified or the context otherwise requires:
 - (a) "City" means the municipal corporation of the City of Edmonton;
 - (b) "City Manager" means the chief Administrative Officer of the City or delegate;
 - (c) "Customer" means any person more particularly described as a "Customer" in Schedule 2 of this bylaw or is otherwise responsible for paying EWSI;
 - (d) "Drainage Services" means the collection, storage, pumping and monitoring of sanitary, storm and

combined wastewater streams by any means and services related to or incidental to such services;

- (e) "Drainage Services Franchise Agreement" means a Franchise Agreement between EWSI and the City in respect of Drainage Services, dated September 1, 2017, including all amendments or replacements thereto;
- (f) "Drainage Services Guidelines" means those requirements, standards, specifications, procedures, protocols or guidelines adopted by EWSI pursuant to Schedule 2 or any other Schedule under this bylaw
- (g) "EWSI" means EPCOR Water Services Inc. or its successor;
- (h) "Performance Based Regulation Plan" means the Performance Based Regulation Plan for the period of April 1, 2022 to March 31, 2025, as more particularly described in Schedule 3 of this bylaw;
- (i) "Price Schedule" means the Rates in respect of Drainage Services or Wastewater Treatment Services more particularly described in Schedule 1 of this bylaw, as approved by the City and in effect at the time;
- (j) "Rate" means the rates, fees, riders and charges applicable to Drainage Services provided by EWSI within the city of Edmonton; and
- (k) "Rate Sheets" means the documents styled as Rate Sheets in Schedule 4 of this bylaw, intended for use as templates for the format in which EWSI's annual requests for Rates are to be filed with the City Manager.
- (l) "Wastewater Treatment Franchise Agreement" means a Franchise Agreement in respect of Wastewater Treatment Services between EWSI and the City, dated March 31, 2009, including all amendments or replacements thereto;
- (m) "Wastewater Treatment Services" means the treatment of wastewater and the storage, pumping

and disposal of treated wastewater by any means and the right to charge and recover a fee for such services in accordance with the provisions of the Wastewater Treatment Franchise Agreement.

RULES FOR INTERPRETATION

3 The marginal notes and headings in this bylaw are for reference purposes only.

RATES EFFECTIVE APRIL 1, 2022

4 Rates, fees and charges for the 12-month period April 1, 2022 – March 31 - 2023 are approved and shall be charged in accordance with Schedule 1.

RATES AFTER MARCH 31, 2023

For each 12 month period from April 1, 2023 to March 31, 2025 Rates for the provision of Drainage Services and Wastewater Treatment Services by EWSI will be established in accordance with Section 8 and are subject to applicable adjustments as set out in Schedule 3 of this bylaw.

TERMS AND CONDITIONS

- The Terms and Conditions of Drainage Service attached hereto in Schedule 2 of this bylaw are approved.
- 7 All Drainage Services and Wastewater Treatment Services provided within the boundaries of the city of Edmonton shall be provided by EWSI except for:
 - (a) Drainage Services or Wastewater Treatment Services which are provided by a person on property of which that person is the owner or tenant for use solely by that person and solely on the property, or
 - (b) Drainage Services or Wastewater Treatment Services for which EWSI has provided written consent for another person to perform.

PRICE SCHEDULE ADJUSTMENTS

- 8 Any adjustments to a Price Schedule made under Section 5 shall be made as follows:
 - (a) On or Before March 1st in each year commencing 2023 and ending in 2024, EWSI shall file for information with the City Manager Rates Sheets effective for the upcoming 12 month period from

- April 1 to March 31, reflecting the Rates in accordance with this bylaw.
- (b) The filings referred to in subsection (a) above must include sufficient information for the City Manager to determine if the performance-based Rates for the upcoming year have been calculated in accordance with the provisions of Schedule 3 of this bylaw.
- (c) If, after reviewing the filings referred to in subsection (a) above, the City Manager is satisfied that the performance-based Rates included in the Rate Sheets have been calculated in accordance with this bylaw, the City Manager shall issue a compliance letter on or before March 15th of each year confirming that the performance-based Rates in the Rate Sheet for the upcoming year have been calculated in accordance with this bylaw.
- (d) Once the compliance letter has been issued in accordance with the provisions of subsection (c), EWSI is authorized to provide Drainage Services and Wastewater Treatment Services pursuant to the Rate Sheets filed in accordance with the provisions of this section.
- (e) The City Manager shall keep a record of all filings made in accordance with this bylaw.

EFFECTIVE DATE 9 This bylaw comes into effect April 1, 2022.

REPEAL 10 Upon this Bylaw becoming effective, Bylaw No. 18100, as amended, is hereby repealed.

SCHEDULES

11 The following schedules are included in, and form part of this bylaw:

Schedule 1 – Price Schedule

Part I – Sanitary and Stormwater Rates

Part II – Service Fees and Charges

Part III – Wastewater Treatment Rates

Schedule 2 – Terms and Conditions of Drainage Service

Schedule 3 – Performance Based Rates: Sanitary, Stormwater and Wastewater Treatment Rates

Schedule 4 – Pro-forma Annual Drainage and Wastewater Rate Filing

READ a first time this	day of	2021;
READ a second time this	day of	2021;
READ a third time this	day of	2021;
SIGNED AND PASSED this	day of	2021;

THE CITY OF EDMONTON
MAYOR
CITY CLERK

Schedule 1

Price Schedule

Rate Sheet 1

Applicable

To all domestic service Customers within the city of Edmonton.

Sanitary Utility Service Charges April 1, 2022 – March 31, 2025

Sanitary utility charges are calculated and levied on each Premises on a monthly basis and are comprised of a Flat Monthly Charge and a Variable Monthly Charge.

Flat Monthly Charge

The Flat Monthly Charge is levied on each Premises based on the size of the Premises' water meter.

Effective Dates and Adjustments for Future Years

The Flat Monthly Charge for the period April 1, 2022 – March 31, 2023 is set out below. Flat Monthly Charges for the period April 1, 2023 to March 31, 2025 will be determined by applying the adjustment factors in Schedule 3 of this Bylaw to the charges set out below, with new charge approval and implementation occurring on an annual basis in accordance with the adjustment methodology prescribed in Section 6 of this Bylaw.

Rate	Flat Monthly Char	:ge

Meter Size	Monthly Charge*
16mm	\$10.65
20mm	\$19.18
25mm	\$29.83
40mm	\$57.53
50mm	\$78.84
75mm	\$162.90
100mm	\$303.42
150mm	\$573.93
200mm	\$915.70
250mm	\$2,272.48
300mm	\$2,272.48
400mm	\$2,486.63
500mm	\$2,677.33

^{*}These charges are subject to change, as permitted by the terms of this bylaw.

Variable Monthly Charge

The Variable Monthly Charge is based on the cubic metre rate in the Variable Monthly Charge Table, subject to adjustments as permitted by this bylaw, and measured by one of the following metered flows:

- i. water consumption for the premises;
- ii. sewer discharge for a premises on which a sewer meter has been installed in accordance with this bylaw; or
- iii. water consumption for the premises as discounted by the application of a utility credit as approved in accordance with this bylaw.

Effective Dates and Adjustments for Future Years

The Variable Monthly Charge for the period April 1, 2022 – March 31, 2023 is set out below. Variable Monthly Charges for the period April 1, 2023 to March 31, 2025 will be determined by applying the adjustment factors in Schedule 3 of this Bylaw to the rates set out below, with new rate approval and implementation occurring on an annual basis in accordance with the adjustment methodology prescribed in Section 6 of this Bylaw.

Variable Monthly Charge Table

Premises	Rate per m ³
All premises (except large wholesale)	\$1.2493
Large Wholesale* with Collection System	\$0.6996

^{*} Large Wholesale means a premises designated as such by EWSI in accordance with this bylaw.

Rate Sheet 2

Stormwater Utility Service April 1, 2022- March 31, 2025

Applicable

To all persons, firms or bodies corporate that receive Water Services or other services related to or incidental to Water Services from EWSI pursuant to Bylaw 19626, as amended, and where the context or circumstances so require includes any person who makes or has made an application for Water Services or otherwise seeks to receive Water Services, and also includes any person acting as an agent or representative of such person, as well as a registered owner or tenant of property to which Water Services are being delivered.

To all persons, firms or bodies corporate that receive Drainage Services, directly or indirectly, or other services related to or incidental to Drainage Services pursuant to this Bylaw or otherwise seeks to receive Drainage Services, and also includes any person acting as an agent or representative of such person, as well as a registered owner or tenant of property to which Drainage Services are being delivered.

All owners or occupants of Premises within the city of Edmonton share costs associated with Stormwater service: Stormwater utility charges are levied on all owners or occupants of Premises that receive Water Services and all other Premises that benefit either directly or indirectly from the conveyance of Stormwater by EWSI facilities. Stormwater utility charges are calculated based on a monthly rate using the following formula:

Stormwater utility charge = $\mathbf{A} \times \mathbf{I} \times \mathbf{R} \times \mathbf{rate}$

the area of premises (m²), and A is:

> the proportion of building lot area attributable to each unit for multiple units sharing a single building or property

I is the development intensity factor of 1.0, except for properties where

> owners have demonstrated that they contribute significantly less stormwater per m² to the City's sewerage system during rainfalls than other similarly zoned properties by making an application for a reduction in the intensity development factor pursuant to this

bylaw.

R is the runoff coefficient based on the zoning of the premises where zoning means the effective zoning designation as it appears on the

tax roll for that premises.

The zoning designation used to calculate a property's Stormwater utility charge is the zoning designation determined by the City of Edmonton through its bylaws or otherwise. If a property's

Part I – Sanitary and Stormwater Rates

zoning designation is not referenced within the Runoff Coefficient Table, EWSI shall, in its sole discretion, use the zoning designation within the Runoff Coefficient Table that most closely aligns with the property's effective zoning designation.

EWSI reserves the right to adjust Stormwater billing factors (area, development intensity factor or runoff coefficient) to ensure that a property's Stormwater utility charge reflects service received by the property.

Runoff Coefficient Table

R	Zoning
0.10	AG
0.20	A, RR
0.30	AP, US (schools)
0.50	RF1, RF2, RF3, RF4, RMH, IH, MA, AGU
0.65	RSL, RF5, RF6, RA7, RPL
0.75	RA8, US (except schools), PU
0.90	RA9, RMX, CNC, CSC, CB1, CHY, CO, IB,
	IM, AGI, DC
0.95	CB2, CMX

Rate

The Stormwater Utility Service Rate for the period of April 1, 2022 – March 31, 2023, unless otherwise adjusted by other mechanisms permitted by this bylaw, is:

Rate	\$0.056908

The Stormwater Utility Service Rate for the period April 1, 2023 to March 31, 2025 will be determined by applying the adjustment factors in Schedule 3 of this Bylaw to the rate set out above, with new rate approval and implementation occurring on an annual basis in accordance with the adjustment methodology prescribed in Section 6 of this Bylaw.

Service Fees and Charges – April 1, 2022 – March 31, 2025

1. Application Fees

Application Type	2022 Fee
Application to release matter	\$189.58
Application to approve a compliance program	Subject to estimate based on cost of service
Records search Application for reduction in stormwater utility credit	\$142.06
Initial application Renewal application	\$400.00 \$225.00
Application for sanitary utility credit	\$400.00

2. Sanitary Sewer Trunk Charges

Applicable

To all owners of a premises abutting an EWSI or City right-of-way in which there is a sanitary or combined sewer, the sanitary sewer trunk charge shall be levied

- (a) when a development permit is issued for development, redevelopment, or renovation on the premises;
- (b) if no development permit is required, when a building permit is issued for development, redevelopment, or renovation on the premises; or
- (c) when an application is made for sewer service to the premises.

For the purpose of calculating the sanitary sewer trunk charge, "secondary suite", "garden suite", and "garage suite", as well as reference to "use classes", have the same meaning as defined by the City of Edmonton Zoning Bylaw, Bylaw 12800, as amended.

Dwelling unit means a self-contained room or rooms with sleeping and cooking facilities, as defined in the City of Edmonton Zoning Bylaw, Bylaw 12800, as amended.

Residential means a premises used primarily for domestic purposes, where no more than four dwelling units are metered by a single water meter and the meter size to the premises is not greater than 50mm.

Part II – Services Fees and Charges

Sanitary sewer trunk charges are calculated as follows:

For development, redevelopment, or renovation of premises for residential use classes:

Dwelling	2022 Fee*	2023 Fee**	2024 Fee**	2025 Fee**
1-2 dwelling units,	\$ λ	\$ λ	\$ λ	\$ λ
excluding secondary				
suites, garden suites, or				
garage suites				
2 dwelling units where		\$ λ	\$ λ	\$ λ
one unit is a secondary	\$ λ			
suite, garden suite, or				
garage suite				
3 or more dwelling units	\$ λ	\$ λ	\$ λ	\$ λ
Commercial	\$ λ	\$ λ	\$ λ	\$ λ
Industrial	\$ λ	\$ λ	\$ λ	\$ λ
Institutional	\$ λ	\$ λ	\$ λ	\$ λ

^{*}Sanitary sewer trunk charges for 2022-2025 shall be adjusted in accordance with an adjustment notice provided by the city of Edmonton, as applicable.

Notwithstanding the above, if a sanitary sewer trunk charge is levied on premises as a result of the redevelopment or renovation of premises, the sanitary sewer trunk charge will be calculated using the following formula:

sanitary sewer trunk charge = A - B

A is:

- the sanitary sewer trunk charge that would have been levied based on the above fees;

 the sanitary sewer trunk charge previously levied and paid for the premises prior to the redevelopment or renovation on the premises;

- if the redevelopment or renovation of the premises is for residential use classes, then the sanitary sewer trunk charge that would have been paid had a sanitary sewer trunk charge been levied with respect to the development that existed on the premises prior to the date of the redevelopment or renovation.
- if the result is a negative figure, the sanitary sewer trunk charge will be deemed to be \$0

B is:

3. Other Service Charges

Hauled Wastewater

The fee for Hauled Wastewater is calculated based on vehicle size:

Fee	\$26.27 per axle, excluding the first steering axle
100	φ20.27 per axic, excluding the first steering axic

If the Hauled Wastewater contains settleable solids in a concentration greater than 100 mL/L, the hauled wastewater fee is double the amount per axle indicated in the table above.

Missed Appointment Fees

To all customers who do not keep a scheduled appointment with an EWSI representative

Missed Flood Assessment Appointment Fee	\$60.00
Missed Obstruction Removal Appointment Fee	\$200.00

No-Access Fee

To all Customers who request EWSI to investigate sewer trouble but fail to provide access to the sanitary cleanout as required by EWSI's Drainage Services Guidelines.

|--|

^{*}This is fee is subject to waiver or reimbursement if the Customer provides access to the sanitary cleanout as required by EWSI's Drainage Services Guidelines within 30 days of the initial investigation request.

Investigation Fee

To all Customers who request EWSI to investigate sewer trouble where the result of the investigation indicates that the sewer trouble is caused by a private plumbing issue.

Investigation Fee	\$200.00 for second and subsequent appointments
-------------------	---

Service Connection Fees

The fee for new sewer connections is calculated on a cost of service basis in accordance with the Drainage Services Guidelines.

Miscellaneous fees

EWSI may impose any other fees on the owner or developer of premises provided that those fees are reasonably connected to the provision of the sewer service to that premises.

Wastewater Treatment Rates

Wastewater Treatment Rates for the period of April 1, 2022 – March 31, 2023, unless otherwise adjusted by other mechanisms permitted by this bylaw, are set out below:

Residential Wastewater Treatment Service

Applicable

To all domestic service Customers and multi-residential service Customers located within the city of Edmonton which are serviced by or connected to the City's sewerage system.

A domestic service is defined as a service supplied to premises used primarily for domestic purposes, where no more than four separate dwelling units are metered by a single water meter and the service line to the premises is not greater than 50 millimeters in diameter.

If a business is conducted from premises that otherwise fall within the above definition of a domestic service, Commercial Wastewater Treatment Service rates apply; provided however, that if a portion of the premises from which the business is conducted is separately metered, then a Commercial Wastewater Treatment Services rate will apply only to that portion of the premises.

Effective Dates and Adjustments for Future Years

Fixed Monthly Services Charges and Consumption Charges for the period April 1, 2023 to March 31, 2025 will be determined by applying the adjustment factors in Schedule 3 of this Bylaw to the rates set out below, with new rate approval and implementation occurring on an annual basis in accordance with the adjustment methodology prescribed in Section 6 of Schedule 1 of this Bylaw.

Rates Fixed Monthly Service Charge

\$6.22 per month

Consumption Charge*

All consumption

\$1.2334 per m³

^{*} Consumption is based on water meter readings unless otherwise approved by EWSI and the City.

Commercial Wastewater Treatment Service

Applicable

To all commercial, industrial and institutional Customers within the city of Edmonton which are serviced by or connected to the City's sewerage system.

To all Customers not otherwise defined as Residential Wastewater Treatment Service Customers.

Effective Dates and Adjustments for Future Years

Fixed Monthly Services Charges and Consumption Charges for the period April 1, 2023 to March 31, 2025 will be determined by applying the adjustment factors in Schedule 3 of this Bylaw to the rates set out below, with new rate approval and implementation occurring on an annual basis in accordance with the adjustment methodology prescribed in Section 6 of this Bylaw.

Rates	Fixed Monthly Service Charge	\$6.22 per month
	Consumption Charge *	
	$0 \text{ m}^3 - 10,000.0 \text{ m}^3$	\$1.2334 per m ³
	$10,000.1 \text{ m}^3 - 100,000.0 \text{ m}^3$	\$0.9542 per m ³
	Over 100,000.0 m ³	$$0.4979 \text{ per m}^3$

^{*} Consumption is based on water meter readings unless otherwise approved by EWSI and the City.

Wastewater Treatment Rate: Sanitary Utility Credit

Applicable

To non-residential wastewater treatment service Customers who can clearly demonstrate that there is a water loss experience between their water consumed and their discharges to the sanitary sewer system on a continuous monthly basis.

The Customer must submit a written application to EPCOR, as required by Schedule 2 to the Bylaw.

Wastewater Overstrength Surcharges

Applicable

Applies to a Customer who releases wastewater to the sewer system that contains one or more constituents that exceed the concentration indicated in this Schedule.

Effective Dates and Adjustments for Future Years

The Wastewater Overstrength Surcharges for the period April 1, 2023 to March 31, 2025 will be determined and adjusted as outlined in Schedule 3 of this Bylaw, with new rate approval and implementation occurring on an annual basis in accordance with the adjustment methodology prescribed in Section 6 of this Bylaw.

Rates

Wastewater Overstrength Surcharge:

The Overstrength Surcharge, applied to each m³ of water consumed, for each kilogram of surchargeable matter per m³ of wastewater that exceeds the concentration indicated for that matter shall be:

		Concentrations Above:
a)	\$0.7743 for Biochemical Oxygen Demand (BOD)	300 mg/L
b)	\$0.7743 for Chemical Oxygen Demand (COD)	600 mg/L*
c)	\$0.6769 for oil and grease	100 mg/L
d)	\$6.4427 for phosphorous	10 mg/L
e)	\$0.7028 for suspended solids, and	300 mg/L
f)	\$1.6445 for total kjeldahl nitrogen (TKN)	50 mg/L
* 0		

^{*} Or twice the BOD concentration in the wastewater, whichever is greater.

Wastewater Additional Overstrength Surcharge:

The Additional Overstrength Surcharge, applied to each m³ of water consumed, for each kilogram of surchargeable matter per m³ of wastewater that exceeds the concentration indicated for that matter shall be:

		Concentrations Above:
a)	\$0.7743 for Biochemical Oxygen Demand (BOD)	3,000 mg/L
b)	\$0.7743 for Chemical Oxygen Demand (COD)	6,000 mg/L*
c)	\$0.6769 for oil and grease	400 mg/L
d)	\$6.4427 for phosphorous	75 mg/L
e)	\$0.7028 for suspended solids, and	3,000 mg/L
f)	\$1.6445 for total kjeldahl nitrogen (TKN)	200 mg/L

^{*} Or twice the BOD concentration in the wastewater, whichever is greater.

Wastewater Overstrength Surcharges Adjustment

Applicable

To Customers to whom the Wastewater Overstrength Surcharges apply and who own and operate facilities that produce and deposit into the sewer system 25,000 m³ or more per month of wastewater with a Biochemical Oxygen Demand equal to or greater than 100 tonnes per month with a ratio of Chemical Oxygen Demand to Biochemical Oxygen Demand (5-day test) less than 2.0.

It must be demonstrated through a technical assessment by EWSI that the impact of treating the Customer's wastewater stream at the Gold Bar Wastewater Treatment Plant will be significantly beneficial for biological nutrient removal. The Customer must provide, at its own cost, all information, samples and other materials that EWSI may require to complete this technical assessment. The Customer will be responsible for the full cost of the EWSI technical assessment.

This adjustment does not apply to Residential Wastewater Treatment Service Customers.

A Customer who wishes to be considered for this adjustment must submit a request in writing to EWSI for review of its Wastewater Overstrength Surcharge and eligibility for the adjustment. EWSI reserves the right to accept or deny any application and the amount and duration of the adjustment will be at the sole discretion of EWSI, as determined by the EWSI study reflecting the Gold Bar Wastewater Treatment Plant operation. Only one Wastewater Overstrength Surcharges Adjustment will be applied to any one Customer at one time.

Rate

A discount from the regular rates for Wastewater Overstrength Surcharges where the level of discount to the Customer will be determined on a case-by-case basis.

Effective Dates

This rate is effective as of and when EWSI amends or approves the rate for the period April 1, 2022 to March 31, 2025.

Wastewater Overstrength Surcharges: Supplementary Information

1. Key Terms

- a. **Biochemical oxygen demand (BOD)** means the quantity of oxygen required for the biochemical degradation of organic material and the oxygen used to oxidize inorganic material such as sulphides and ferrous iron during a 5-day, 20 degree Celsius incubation period and may measure the oxygen used to oxidize reduced forms of nitrogen, as determined by using a standard procedure.
- b. **Chemical oxygen demand (COD)** means a measure of the oxygen equivalent of the organic content of a sample that is susceptible to oxidation by a strong chemical oxidant, as determined by using a standard procedure.
- c. **Flow monitoring point** means an access point to the building drain, building sewer, private drainage system or sewer service for the purpose of collecting representative samples of the wastewater being released from the premises.
- d. **Oil and grease** means any solvent extractable material of animal, vegetable or mineral origin, as determined by using a standard procedure.
- e. **Phosphorus** means all forms of phosphorus in a sample, as determined by using a standard procedure.
- f. **Suspended solids** means the portion of total solids retained by a filter, as determined by using a standard procedure.
- g. **Total Kjeldahl Nitrogen (TKN)** means organically bound nitrogen plus ammonia nitrogen, as determined by using a standard procedure.

2. Determination of Wastewater Overstrength Surcharges

EWSI or its agent:

- a. will collect a composite sample of the wastewater being released over any 24 hour period or part thereof;
- b. will determine the concentration of the surchargeable constituents in the sample, using a standard procedure;
- c. will calculate the average concentration of each constituent from a minimum of four (4) composite samples taken over a period of more than seven (7) days, and not longer than a 12 month period;

- d. may, where the concentration(s) of the overstrength constituent(s) are in the same range as those used to establish the existing overstrength surcharge, use the existing mean concentrations to set the overstrength surcharge rate until such time as the concentrations fall outside the existing range;
- e. will calculate the average number of kilograms of each surchargeable constituent per cubic metre of wastewater, that exceeds the concentration indicated in Part IV "Wastewater Overstrength Surcharge" and "Wastewater Additional Overstrength Surcharge" of this Schedule; and,
- f. will calculate the Wastewater Overstrength Surcharges which will appear on the Customer's utility bill using the following formula:

Overstrength surcharge (\$) =

$$\frac{m^{3}\{(Ob\ (Cxb-300)+Oc(Cxc-Cac)+Oo(Cxo-100)+Op(Cxp-10)+Os\ (Cxs-300)+On(Cxn-50)\}}{100,000}$$

Where:

- m³ is the total water consumption in cubic meters (or, if approved, sewer metering);
- Ob, Oc, Oo, Op, Os and On are the Overstrength surcharge set out in Part IV for each kilogram of BOD, COD, oil and grease, phosphorus, suspended solids, and TKN, respectively.
- Cxb, Cxc, Cxo, Cxp, Cxs, Csn are the average concentrations in milligrams per liter (mg/L) of BOD, COD, oil and grease, phosphorus, suspended solids and TKN, respectively, in the sampled wastewater.
- Cac is 600 or double the average BOD concentration in mg/L, whichever is greater.
- The additional surcharge is calculated using the above formula but substituting 3000, 400, 75, 3000 and 200 for 300, 100, 10, 300 and 50, respectively, and Cac is 6000 or double the average BOD concentration in mg/L, whichever is greater.
- Where the remainder of a subtraction is a negative number, that component of the formula becomes equal to zero.

Wastewater Overstrength Surcharges: Supplementary Information

3. Application of Wastewater Overstrength Surcharges

a. Single Business, Multiple Sewers:

Where the wastewater from a premises is released through two or more building sewers and where there is no accurate measurement of the individual flows being released, the release that would produce the highest surcharge will be used to determine the overstrength surcharge on all releases.

b. Multiple Businesses, Single Water & Sewer Service:

Wastewater released through a single sewer service from a premises with two or more separate businesses serviced by a single water service will be considered as being released by the person responsible for the payment of the utility bill for that water meter.

- c. Multiple Businesses, Multiple Water Services & Single Sewer Service Wastewater released through a single sewer service from a premises with two or more separate businesses, each serviced by separately metered water services, will be considered as being released from each of the separate businesses, in proportion to the separate business' water consumption, unless it is shown to the satisfaction of EWSI or its agent, by the owner of the premises, that:
 - i. the portion of the wastewater that is overstrength is being released from only one of the businesses serviced by a separate metered water service on the premises; and,
 - ii. the release from that business can be monitored separately from the other businesses.

Wastewater Overstrength Surcharges: Supplementary Information

4. Review of Wastewater Overstrength Surcharges

A Customer may request a review of the Wastewater Overstrength Surcharge or the Additional Overstrength Surcharge, or both, by applying in writing to EWSI to have the specific charges reviewed.

The Customer making the request will supply to EWSI:

- a. analytical data from analyses of composite samples:
 - i. collected over the period of time over which the surcharge was calculated;
 - ii. collected from the flow monitoring point in accordance with section 2(a) of this Wastewater Overstrength Surcharge: Supplementary Information;
 - iii. analyzed in accordance with section 2(b) of this Wastewater Overstrength Surcharge: Supplementary Information; and,
 - iv. supported by the analytical data indicating the accuracy and precision of the analyses; and
- b. any other information EWSI deems necessary to carry out the review.

EWSI will determine whether the Wastewater Overstrength Surcharge, the Additional Overstrength Surcharge, or both, should be recalculated for the time period being reviewed.

Schedule 2

Terms and Conditions of Drainage and Wastewater Treatment Service

Table of Contents

ARTIC	CLE 1 - DEFINITIONS AND INTERPRETATION	1
1.1	Definitions	1
1.2	Conflicts	6
1.3	Extended Meanings	6
1.4	Headings	6
ARTIC	CLE 2 - GENERAL PROVISIONS	6
2.1	Fundamental Obligations of EWSI and of Customers	6
2.2	Billing and Customer Accounts	7
2.3	Drainage Services Guidelines	7
ARTIC	CLE 3 - SEWER CONNECTIONS AND ALTERATIONS	9
3.1	Sewerage System	9
3.2	Sanitary Connection Required	10
3.3	New Sanitary Service	10
3.4	Surface Drainage Connection Required	10
3.5	High Potential Contaminant Release Areas	10
3.6	Foundation Drainage	11
3.7	Sewer Alterations	11
3.8	Temporary Sewer Service	11
ARTIC	CLE 4 - SEWER CONNECTION REGULATIONS	11
4.1	Combined Sewer Regulations	11
4.2	Roof Leaders	12
4.3	Flow Monitoring Points	12
4.4	Interceptors	12
4.5	Dental Amalgam	13
4.6	Screening and Pretreatment	13
4.7	Monitoring Devices	13
4.8	Interference	13
4.9	Property Limitations	14
4.10	Abandonment	14
4.11	Construction and Maintenance of Private Drainage Systems	14
4.12	Stormwater Management Facilities	14

ARTI	CLE 5 - RELEASES	14
5.1	No Release	14
5.2	No Prohibited Waste	14
5.3	No Restricted Waste	14
5.4	No Hazardous Waste	15
5.5	Waste Management	15
5.6	No Dilution	15
5.7	Large Volume Releases	15
5.8	Sanitary Sewer Permitted Releases	15
5.9	Combined Sewer Permitted Releases	16
5.10	Sanitary and Combined Sewer Permitted Releases	17
5.11	Storm Sewer Permitted Releases	17
5.12	Storm Sewer Permitted Releases requiring EWSI Approval	18
5.13	Hauled Wastewater	19
5.14	Residue Disposal	20
5.15	Compliance Program	20
5.16	Release Reporting	20
5.17	Release Control	21
5.18	Owner Report	21
ARTI	CLE 6 - SURFACE DRAINAGE	21
6.1	Release of Stormwater and Subsurface Water	21
6.2	Compliance with Encumbrances	22
ARTI	CLE 7 - APPLICATIONS, PERMITS AND APPROVALS	22
7.1	Requirement for Account and Obligation to Pay	22
7.2	Applications for Connections	22
7.3	Applications to Release Matter	23
7.4	Applications for Compliance Program Approval	23
7.5	Applications for Sewer Metering Approval	23
7.6	Applications for Utility Credit	23
7.7	Compliance with Conditions	24
7.8	Rejection of Application for Drainage Services	24
7.9	Customer Contracts	25
7.10	Authorizations and Approvals for Service Connection	25

7.11	Scheduling for Service Connection	25
ARTI	CLE 8 - DRAINAGE SERVICE REQUIREMENTS AND FACILITIES	26
8.1	Protection of EWSI's Facilities and Property of Other Customers	26
	CLE 9 - EASEMENTS, RIGHTS-OF-WAY, AND USE OF AND ACCESS LITIES	
9.1	Easements and Rights-of-Way	27
9.2	Right of Entry	27
9.3	Access to Sewerage System	28
9.4	Customer Responsibility for Use of Facilities	29
ARTI	CLE 10 - SEWERAGE SYSTEM EXTENSIONS	29
10.1	Estimated Cost	29
10.2	Agreement in Writing for Sewerage System Extension	29
10.3	Customer Payment for Sewerage System Extension Costs	29
10.4	Changes to Amount Payable by Customer	29
ARTI	CLE 11 - DRAINAGE SERVICE CONNECTIONS	30
11.1	Engineering, Design and Construction Requirements for Service Connections	30
ARTI	CLE 12 - CHANGES TO SERVICE CONNECTIONS OR OTHER FACILITIES	.30
12.1	Requirement to Give Notice of Changes to Drainage Service Requirements	30
12.2	Customer to Bear Cost of Changes to EWSI Facilities	30
ARTI	CLE 13 - GENERAL RESTRICTIONS AND PROHIBITIONS	31
13.1	Discontinuation of Drainage Service	31
13.2	Discontinuation of Water Service.	31
13.3	Prohibition of Release	31
13.4	Refusal to Approve Plans	31
13.5	Obstruction	31
13.6	Contravention of Terms and Conditions	31
ARTI	CLE 14 - LIABILITY AND INDEMNIFICATION	32
14.1	Limitation of EWSI Liability	32
14.2	Release	33
14.3	EWSI Not Liable to Customer	33
14.4	Customer Liability	33
14.5	Force Majeure	34
ARTI	CLE 15 - ADDITIONAL PROVISIONS RELATING TO DRAINAGE SERVICE	S34

15.1	Ownership of Facilities	34
15.2	Proper Use of Drainage Services	35
15.3	Compliance with Applicable Legal Authorities	35
15.4	Powers of EWSI	35
15.5	Interference with EWSI's Property	36
15.6	Drainage Services Interruptions and EWSI Obligation to Respond	36
15.7	Assignments	37
15.8	No Waiver	38
15.9	Law	38
APPEN	DIX A – PROHIBITED WASTES	39
APPENDIX B – RESTRICTED WASTES APPLICABLE TO SANITARY AND COMBINED SEWERS42		
	DIX C – RESTRICTED WASTES APPLICABLE TO STORM SEWERS ARCOURSES	

INTRODUCTION TO TERMS AND CONDITIONS

These Terms and Conditions, as approved by the municipal council of the City of Edmonton, form part of Bylaw 18100 (the "EPCOR Drainage Services Bylaw") which regulates the provision of Drainage Services in the city of Edmonton by EPCOR Water Services Inc. ("EWSI"). The EPCOR Drainage Services Bylaw, which also includes the EWSI Price Schedule in effect from time to time, is enacted pursuant to the powers vested in the City under the provisions of the *Municipal Government Act*. R.S.A. 2000 C. M-26.

These Terms and Conditions apply to EWSI and its relationship with all of its Customers. Every Customer, by applying for or using a Service Connection or Drainage Services or other services of any kind provided by EWSI under the authority of these Terms and Conditions, is deemed to have accepted these Terms and Conditions and is bound by and subject to them.

Unless otherwise agreed in writing by EWSI and a Customer, provision of Drainage Services or other services by EWSI to Customers will occur only in accordance with these Terms and Conditions.

ARTICLE 1 - DEFINITIONS AND INTERPRETATION

1.1 Definitions

The following words and phrases, whenever used in these Terms and Conditions or in an application, contract or agreement for service under these Terms and Conditions, shall have the meanings set forth below:

"Account" means a written and/or digital record of use of Drainage Services or other services by a Customer, including the amounts payable from time to time by the Customer to EWSI;

"Authorized Agent" means a person who has a valid EWSI access permit as set out in the Drainage Services Guidelines;

"Billing and Customer Care Matters" includes the provisions described in Articles 3.1, 3.3 and 3.5 of the EPCOR Water Services and Wastewater Treatment Bylaw;

"Biohazardous Agent, Risk Group 4" means an agent that is likely to cause serious or lethal human disease for which preventive or therapeutic interventions are not usually available;

"Business Day" means a day, which is not a Saturday, Sunday or a statutory holiday in the Province of Alberta, and "day" means any calendar day;

- "City" means the municipal corporation of the City of Edmonton;
- "City right-of-way" means land in which the City has an interest, including road right-of-ways and easements in favour of the City;
- "Combined Sewer" means a sewer used for the collection and transmission of Wastewater and Stormwater;
- "Customer" means any Person, firm or body corporate that receives Drainage Services or other services related to or incidental to the Drainage Services from EWSI pursuant to the EPCOR Drainage Services Bylaw and where the context or circumstances so require includes any Person who makes or has made an application for Water Services or otherwise seeks to receive Water Services, and also includes any Person acting as an agent or representative of a Customer, as well as a registered Owner of property to which Drainage Services are being delivered;
- "Disturbed Ground" means terrain (surface or sub-surface) that is disturbed and that may require incremental construction techniques or support systems to provide stability;
- "Drainage Services" includes but is not limited to the collection, storage, pumping and monitoring of sanitary, storm and combined waste streams by any means in accordance with the provisions of the Drainage Services Franchise Agreement, any and all incidental services more particularly described in these Terms and Conditions, and the use of physical plant, equipment, apparatus, appliances, property and Facilities owned or employed by EWSI or used in connection with EWSI in providing the Drainage Services for the property of any Customer;
- "Drainage Services Agreement" means any agreement under which EWSI has or may incur an obligation to provide Drainage Services to one or more Customers, and may at EWSI's sole option include any servicing agreement entered into by the City to which EWSI is not a party to the extent that the servicing agreement addresses the provision of Drainage Services to a Customer;
- "Dwelling" means a private residence with sleeping and cooking facilities used or intended to be used permanently or semi-permanently as a residence;
- **"EPCOR Water Services and Wastewater Treatment Bylaw"** means City of Edmonton Bylaw 17698 as amended.
- "EWSI" means EPCOR Water Services Inc. or its successor;

- "EWSI right-of-way" means land in which the EWSI has an interest, including road right-of-ways and easements in favour of the EWSI;
- "Facilities" means any infrastructure forming part of the Sewerage System owned or used by EWSI.
- "Flow Monitoring Point" means an access point to Sewer Service or Private Drainage System for a premises, examples of which include manholes and dip wells;
- "Force Majeure" means circumstances not reasonably within the control of EWSI, including acts of God, strikes, lockouts or other industrial disturbances, acts of the public enemy, wars, blockades, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, storms, floods, high water, washouts, inclement weather, orders or acts of civil or military authorities, civil disturbances, explosions, breakdown or accident to equipment, mechanical breakdowns, intervention of federal, provincial or local government or any of their agencies or boards, the order or direction of any court, and any other cause, whether of the kind herein described or otherwise;
- "Foundation Drainage System" means a system of pipes, fittings, traps and appurtenances used to convey Subsurface Water;
- "Hauled Wastewater" means Wastewater transported by vehicle for disposal;
- **"Hazardous Waste"** has the same meaning as in the *Waste Control Regulation*, Alta Reg. 192/1996 to the *Environmental Protection and Enhancement Act*, RSA 2000, c E-12 as amended and any successor to that legislation;
- "High Potential Contaminant Release Area" means an area where activities occur that have a high potential to Release Prohibited Waste, Restricted Waste or Hazardous Waste and includes:
 - (a) the loading dock of a building and the area within one metre of the loading dock:
 - (b) the area within two metres of any device used to compact refuse;
 - (c) auto wrecker storage yards;
 - (d) the area where non-residential vehicles or equipment are washed and the surrounding two metres in each direction;
 - (e) the area where the transfer of materials takes place and the surrounding two metres in each direction; and

- (f) any other area designated by EWSI;
- "Lot Grading Plan" means a drainage design plan signed and sealed by a professional acceptable to the City Manager;
- "Multiple Dwelling" means a wholly or partially residential development containing more than one Dwelling, whether or not the development is within a single building or structure, which receives Water Services through a total number of Service Connection Points that is less than the total number of Dwellings in the residential development;

"Owner" means:

- (a) the registered Owner of a parcel of land in the register maintained by the Registrar of Land Titles under the *Land Titles Act*; or
- (b) a Person who has purchased the parcel from the Person mentioned in sub clause (a) pursuant to an agreement for purchase and sale;
- "Person" means an individual, partnership, association, corporation, organization, business, cooperative, trustee, executor, administrator or legal representative;
- "Premises" means a parcel of land and any buildings situated on that land;
- "Price Schedule" means the rates, fees and charges for Drainage Services more particularly described in Schedule 1 of the EPCOR Drainage Services Bylaw, as approved by the City and in effect at the time;
- "Private Drainage System" means an Owner's assembly of pipes, fittings, traps and appurtenances used to convey Wastewater, Stormwater and Subsurface Water to the Sewer Service;
- "Prohibited Waste" means matter prohibited from entering the Sewerage System as set out in Appendix A;
- "Release" means to directly or indirectly conduct matter by spilling, discharging, depositing, disposing of, abandoning, leaking, seeping, pouring, draining, emptying, or any other means;
- "Restricted Waste" means matter only permitted in the Sewerage System in limited quantities as set out in Appendix B and Appendix C;

"Sanitary Sewer" means a sewer used for the collection and transmission of Wastewater;

"Service Connection" means all of the Facilities required to achieve a physical connection between an EWSI sewer main abutting Customer property and a Private Drainage System to allow a Customer to access the Sewerage System and obtain Drainage Services;

"Service Connection Point" means the point where a Service Connection owned by EWSI and forming part of the Sewerage System physically connects to a Private Drainage System (which will ordinarily, but not necessarily, be a point at or near a Customer's property line);

"Sewer Service" means the pipe connecting a Private Drainage System to the Sewerage System;

"Sewerage System" means all EWSI owned infrastructure for the collection, storage, transportation and pumping of Wastewater and Stormwater and includes sewers, ditches, channels, Stormwater management facilities, Wastewater treatment facilities, sludge treatment facilities, biosolids storage and disposal facilities;

"Storm Sewer" means a sewer used for the collection and transmission of Stormwater and Subsurface Water;

"Stormwater" means surface run-off water that is the result of natural precipitation;

"Subsurface Water" means naturally occurring water that collects or flows beneath the ground surface filling the porous space of sediment, soil and rocks;

"Terms and Conditions" means the terms and conditions in respect of Drainage Services described herein.

"Wastewater" means water discharged from a premises; and

"Watercourse" means:

- (a) the bed and shore of a river, stream, lake, creek, lagoon, swamp, marsh or other natural body of water; or
 - (b) a canal, ditch, reservoir, Stormwater management facility or other manmade surface drainage feature;

whether or not it contains or conveys water continuously or intermittently.

1.2 Conflicts

If there is any conflict between a provision in these Terms and Conditions, and a provision in a Drainage Services Agreement or other agreement between EWSI and a Customer, the provision in these Terms and Conditions shall govern unless an express term of the Drainage Services Agreement or other agreement states otherwise.

1.3 Extended Meanings

In these Terms and Conditions, words importing the singular number shall include the plural and vice versa, words importing the masculine gender shall include the feminine and neuter genders and vice versa. Words importing a Person shall include a Person, firm, partnership, corporation, organization or association (including, without limitation, individual members of any unincorporated entity).

1.4 Headings

The division of these Terms and Conditions into sections, subsections and other subdivisions and the insertion of headings are for convenience of reference only and shall not affect the construction or interpretation of these Terms and Conditions.

ARTICLE 2 - GENERAL PROVISIONS

2.1 Fundamental Obligations of EWSI and of Customers

- (a) EWSI will provide Drainage Services, at the fees, rates or other charges specified in the Price Schedule in accordance with these Terms and Conditions and with applicable provisions of the Drainage Services Guidelines. All additional services provided by EWSI to a Customer will be billed to the Customer in accordance with an agreement between the Customer and EWSI. The general costs of operating and maintaining the Sewerage System are covered by the rates for Drainage Services set out in the Price Schedule. EWSI will operate and maintain the Drainage System at no additional charge to any Customer beyond the fees, rates and charges for Drainage Services set out in the Price Schedule or in a Drainage Services Agreement, except for costs arising from:
 - (i) requirements or requests for specific non-routine services not more particularly described in the Price Schedule, or the acts or omissions of any particular Customer or defined group of Customers; and
 - (ii) repairs or remedies of any loss or damage to Facilities or other property that is caused by a Customer or any other party for whom a Customer is responsible in law, including, without limitation, any costs or damages described in any judgment of a court in EWSI's favour.

Such additional costs may at EWSI's sole option (and in addition to any other legally available remedies) be added to a Customer's Account as an additional amount due and payable by the Customer to EWSI.

- (b) When EWSI performs a repair on its Facilities affecting a Customer's property, EWSI will make all reasonable efforts to return the property to its original or similar to original condition as soon as practicable after the repair is completed.
- (c) Where any Facilities required to supply Drainage Services to a Customer are located in Disturbed Ground, or where any other unusual condition exists, EWSI's obligation to construct does not include incremental construction costs required to stabilize such Facilities or the disturbed ground, or to address other unusual conditions. The Customer may at EWSI's sole option be required to pay all additional construction costs in such circumstances, including the costs of any required support system.

2.2 Billing and Customer Accounts

The Terms and Conditions applicable to Billing and Customer Care Matters as provided in EPCOR Water Services and Wastewater Treatment Bylaw, Schedule 2, shall apply.

2.3 Drainage Services Guidelines

- (a) EWSI may adopt written requirements, standards, specifications, procedures, protocols or guidelines supplementary to these Terms and Conditions (the "Drainage Services Guidelines") as EWSI deems advisable for the purpose of clarifying or explaining:
 - (i) any fee, rate or other charge set out in the Price Schedule, including the circumstances and the manner in which such fee, rate or charge will be applied and billed to a Customer;
 - (ii) the manner in which EWSI's obligations under the EPCOR Drainage Services Bylaw and any applicable federal or provincial legislation or regulations will be fulfilled and the impacts on Customers;
 - (iii) EWSI's operating policies and procedures, and its requirements in relation to provision of Drainage Services or other services, including without limitation requirements intended to: provide security for costs incurred by EWSI, ensure the health and safety of employees, ensure the safety of the infrastructure used for the collection, storage, transportation and pumping of sanitary, storm and combined waste streams, and ensure and maintain the reliability of the Drainage System.

EWSI may amend the Drainage Services Guidelines from time to time to reflect changes to the industry, EWSI's requirements or the changing needs of EWSI's Customers. A copy of the

Drainage Services Guidelines and amendments thereto will be filed with the City Manager for information purposes and can be accessed at www.epcor.com.

The Drainage Services Guidelines and any amendments thereto shall be effective as of the date posted to EWSI's website. Without limitation to the foregoing and in the interest of greater clarity, the term "amend" in this clause includes the deletion of all or any portion of any Drainage Services Guideline previously filed with the City Manager.

- (b) Without limiting the generality of Section 2.3(a) above, Drainage Services Guidelines may deal with any or all of the following subject matter:
 - (i) procedures or requirements concerning investigation of Customer complaints and concerns;
 - (ii) procedures or requirements for provision of temporary Drainage Services, including without limitation Drainage Services provided during the construction phase of a development;
 - (iii) procedures or requirements for upgrading, re-sizing relocating or otherwise changing a Drainage Service Connection, whether at the instigation of EWSI or at the request of a Customer;
- (c) Without limiting the generality of Section 2.3 (a) above, Drainage Services Guidelines shall include:
 - (i) Guidelines for public access to information related to Drainage Services consistent with the requirements of the Freedom of Information and Protection of Privacy Act, RSA 2000 c F-25, as amended; and
 - (ii) Guidelines for EWSI's Public Engagement Program consistent with the City's public engagement policy as may be amended.
- (d) The following are deemed to be Drainage Services Guidelines and are effective and binding upon every Customer. The guidelines referenced in subsections (i) (viii) may be amended or rescinded from time to time by EWSI. The guidelines referenced in subsections (ix) and (x) may be amended from time to time by EWSI.
 - (i) Code of Practice: Oil, Grease & Sediment Interceptor Installation & Maintenance Requirements and Vehicle/Equipment Service & Washing; (S.5, Bylaw 19137, February 19, 2020)
 - (ii) Code of Practice: Hauled Wastewater Discharge Requirements;
 - (iii) Code of Practice: Dental Amalgam Separator Installation & Maintenance Requirements;

- (iv) Code of Practice: Fat, Oil & Grease and Solids Interceptor Installation & Maintenance Requirements and Commercial/Institutional Food Preparation; (S.6, Bylaw 19137, February 19, 2020)
- (v) Code of Practice: Large Volume Releases;
- (vi) Code of Practice: Commercial / Industrial Line Flushing;
- (vii) Code of Practice: Flow Monitoring Point Installation Requirements;
- (viii) The document entitled "Design and Construction Standards for the City of Edmonton Volume 3 Drainage";
- (ix) Guidelines for Public Access to Drainage Services information;
- (x) Guidelines for Public Engagement Program; and
- (xi) The document entitled "EPCOR Drainage Services Water and Sewer Connections Guidelines"
- (e) While EWSI is committed to, and will endeavour to comply with, its Drainage Services Guidelines, the operations of EWSI are complex and dynamic and the Drainage Services Guidelines may not appropriately or exhaustively deal with every situation that arises. With the exception of the Drainage Service Guidelines provided by Article 2.3(c), EWSI, acting reasonably, may deviate from the provisions of the Drainage Services Guidelines or take action not specifically authorized by these Terms and Conditions or by the Drainage Services Guidelines at EWSI's sole discretion.

ARTICLE 3 - SEWER CONNECTIONS AND ALTERATIONS

3.1 Sewerage System

- (a) No Person or Owner shall:
 - (i) construct or alter any sewer or Sewer Service;
 - (ii) alter any surface grades or elevations; or
 - (iii) install or alter a culvert;

within a City or EWSI right-of-way, unless a permit authorizing the construction or alteration has been issued by EWSI.

(b) The Owner of a premises with an access abutting a City or EWSI right-ofway containing a culvert shall maintain the culvert in order to keep it free from obstruction

3.2 Sanitary Connection Required

The Owner of premises abutting a City or EWSI right-of-way in which there is a Sanitary or Combined Sewer shall apply to EWSI to have the Private Drainage System connected to the Sanitary or Combined Sewer prior to occupancy of the premises.

3.3 New Sanitary Service

When EWSI provides notice to an Owner that a Sanitary Sewer is newly available in the City or EWSI right-of-way abutting the Owner's premises, the Owner shall connect the Private Drainage System from the premises in the manner directed by EWSI.

3.4 Surface Drainage Connection Required

- (a) The Owner of premises other than single family or duplex residential premises shall provide a Private Drainage System for Stormwater from:
 - (i) roofs;
 - (ii) parking areas;
 - (iii) storage areas;
 - (iv) paved areas; and
 - (v) courtyards.
- (b) The Owner of a premises requiring a Private Drainage System pursuant to this section shall apply to EWSI to connect that Private Drainage System to:
 - (i) a Storm Sewer where available;
 - (ii) a Combined Sewer where a Storm Sewer is not available; or
 - (iii) a location designated by EWSI.

3.5 High Potential Contaminant Release Areas

- (a) The Owner of a premises containing a High Potential Contaminant Release Area shall ensure:
 - (i) that the High Potential Contaminant Release Area drains to a separate drain from the surrounding area;
 - (ii) that run-off from the area surrounding the High Potential Contaminant Release Area does not enter the High Potential Contaminant Release Area; and

- (iii) that the High Potential Contaminant Release Area drains either:
 - (A) to a Stormwater pretreatment facility prior to draining to the Storm Sewer; or
 - (B) to the Sanitary or Combined Sewer, but only if:
 - i) the High Potential Contaminant Release Area is covered;
 - ii) the High Potential Contaminant Release Area is less than the greater of:
 - (I) 8 square metres per loading dock; or
 - (II) 250 square metres in total area; or
 - iii) approval has been given by EWSI.

3.6 Foundation Drainage

The Owner of a premises shall apply to EWSI to have the Foundation Drainage System for the premises connected to:

- (a) a Storm Sewer where available; or
- (b) a location designated by EWSI.

3.7 Sewer Alterations

The Owner of a premises may apply to EWSI to have EWSI alter:

- (a) the size of the Sewer Service to the premises; or
- (b) the elevation of the Sewer Service to the premises.

3.8 Temporary Sewer Service

The Owner of a premises that does not abut a City or EWSI right-of-way in which there is a Sanitary or Combined Sewer may apply to EWSI for temporary Sewer Service.

ARTICLE 4 - SEWER CONNECTION REGULATIONS

4.1 Combined Sewer Regulations

- (a) The Owner of premises, other than single family or duplex residential premises, serviced by a Combined Sewer:
 - (i) shall install separate Private Drainage Systems for Stormwater and Wastewater; and
 - (ii) may combine the Private Drainage Systems at the property line.
- (b) When a Storm Sewer becomes available in a City or EWSI right-of-way abutting the premises referenced in this section, EWSI may require the Private Drainage System for Stormwater be connected to the Storm Sewer.

4.2 Roof Leaders

The Owner of single family or duplex residential premises shall not connect roof leaders to a Combined Sewer unless EWSI has directed that the roof leaders be connected to the Combined Sewer.

4.3 Flow Monitoring Points

- (a) The Customer or Owner of a premises serviced by the Sewerage System shall install and maintain an accessible Flow Monitoring Point, consistent with the Flow Monitoring Point Installation & Maintenance Requirement Code of Practice, on each pipe leaving the property:
 - (i) when the pipe is new;
 - (ii) when the premises is redeveloped; or
 - (iii) when required to do so by EWSI.
- (b) A Flow Monitoring Point required by this section shall be constructed and maintained in accordance with the Flow Monitoring Point Installation & Maintenance Requirements Code of Practice as provided in the Drainage Service Guidelines.
- (c) The Owner of a premises shall ensure that EWSI has a safe and reasonable means of accessing the Flow Monitoring Point.
- (d) Unless exempted by EWSI, this section applies to all premises except single-family or duplex properties that discharge only Wastewater from domestic sources.

4.4 Interceptors

- (a) The Customer or Owner of any premises in which there is commercial or institutional food preparation shall provide, install and maintain a fat, oil and grease interceptor consistent with the requirements in the Fat, Oil & Grease and Solids Interceptor Installation & Maintenance Requirements and Commercial/Institutional Food Preparation Code of Practice:
 - (i) on all fixtures that may release fat, oil, grease or solids; or
 - (ii) downstream of all fixtures that may release fat, oil, grease or solids.
- (b) The Customer or Owner of a premises in which vehicles or equipment are serviced, repaired, disassembled or washed shall provide an oil, grease and sediment interceptor consistent with the specification of the Oil, Grease and Sand Interceptor Installation and Maintenance Requirements Code of Practice:
 - (i) on all fixtures that may release oil, grease or sediment; or

- (ii) downstream of all fixtures that may release oil, grease or sediment.
- (c) The Owner of a premises shall install an interceptor when required to do so by EWSI.
- (d) All interceptors required by this section shall be installed and maintained in accordance with the applicable Code of Practice.
- (S.7, 8, 9, 10, 11, 12, Bylaw 19137, February 19, 2020)

4.5 Dental Amalgam

- (a) The Owner of a premises in which a dental facility is located shall install a dental amalgam separator on all fixtures that may release dental amalgam waste to the Sewerage System.
- (b) All separators required by this section shall be installed and maintained in accordance with the Dental Amalgam Separator Installation & Maintenance Requirements Code of Practice as provided in the Drainage Service Guidelines.
- (c) This section does not apply to premises:
 - (i) practicing exclusively Orthodontics and Dentofacial Orthopedics; Oral and Maxillofacial Surgery, Oral Medicine and Pathology, Oral and Maxillofacial Radiology, or Periodontics; or
 - (ii) exempted, in writing, by EWSI.

4.6 Screening and Pretreatment

The Owner of a premises shall install screens or pretreatment facilities or modify pretreatment processes, within the Private Drainage System for the premises when required to do so by the EWSI.

4.7 Monitoring Devices

- (a) The Owner of a premises shall install and maintain monitoring devices when required to do so by EWSI.
- (b) An Owner required to install and maintain a monitoring device pursuant to this section shall:
 - (a) submit the data produced by the monitoring device to EWSI on a monthly basis; and
 - (b) notify EWSI immediately when the monitoring device detects a Release of a Hazardous, Prohibited or Restricted Waste.

4.8 Interference

No Person or Owner shall alter, remove or destroy any:

(a) device, facility or infrastructure in a Private Drainage System used to control the rate of release to the Sewerage System;

- (b) drainage devices, facilities or infrastructure installed on private property that have been required or approved by the EWSI; or
- (c) part of the Sewerage System.

4.9 Property Limitations

- (a) The Owner of a premises shall not extend the Private Drainage System for the premises to any other separately titled lot.
- (b) This section does not apply to extensions to:
 - (i) the City or EWSI right-of-way; or
 - (ii) common property under the *Condominium Property Act*, RSA 2000, c C-22 as amended.

4.10 Abandonment

The Owner of a premises where the Private Drainage System has been, or will be, abandoned shall cap the Sewer Service in a manner acceptable to EWSI.

4.11 Construction and Maintenance of Private Drainage Systems

The Owner of a premises shall be responsible for the construction, maintenance and repair of the Private Drainage System.

4.12 Stormwater Management Facilities

- (a) A Person shall not wade, swim, boat, fish, skate, allow pets to enter or carry on any other recreational activity on or in a EWSI Stormwater management facility except as permitted by EWSI. (S. 13, Bylaw 19137, February 19, 2020)
- (b) A Person shall not remove any water from or modify access to an EWSI Stormwater management facility except as permitted by EWSI.
- (c) A Person shall not facilitate any of the activities prohibited by this section.

ARTICLE 5 - RELEASES

5.1 No Release

No Person shall release or permit the release of any matter into the Sewerage System or any Watercourse except as permitted in this Article.

5.2 No Prohibited Waste

No Person shall release or permit the release of any Prohibited Waste into the Sewerage System except as permitted in this Article.

5.3 No Restricted Waste

No Person shall release or permit the release of any Restricted Waste into the Sewerage System except as permitted in this Article.

5.4 No Hazardous Waste

No Person shall release or permit the release of any Hazardous Waste into the Sewerage System except as permitted in this Article.

5.5 Waste Management

- (a) A Person who keeps, stores or transports a Prohibited or Restricted Waste shall do so in a manner that ensures that the Prohibited or Restricted Waste is not Released into the Sewerage System.
- (b) A Person who keeps or stores a Prohibited or Restricted Waste shall ensure that those materials are sequestered through secondary containment, barriers and/or distance to ensure that the Prohibited or Restricted Waste is not Released into the Sewerage System.

5.6 No Dilution

No Person shall dilute Wastewater in order to enable the release of that Wastewater in accordance with this Article.

5.7 Large Volume Releases

- (a) No Person shall Release Wastewater that exceeds a volume of 10 cubic metres, into the Sewerage System except as permitted in this Article.
- (b) A Person may Release Wastewater that exceeds a volume of 10 cubic metres, into the Sewerage System if the Release is performed in accordance with the Large Volume Releases Code of Practice as established in the Drainage Service Guidelines established by EWSI.

5.8 Sanitary Sewer Permitted Releases

The following may be Released into a Sanitary Sewer:

- (a) Wastewater that does not contain:
 - (i) a Hazardous Waste;
 - (ii) a Prohibited Waste; or
 - (iii) a Restricted Waste
- (b) roof drainage and Subsurface Water from premises connected for that purpose in accordance with this bylaw;
- (c) water obtained from a source other than EWSI in a volume less than or equal to 1 cubic metre per day;
- (d) Stormwater from a High Potential Contaminant Release Area that is
 - (i) covered; or
 - (ii) less than the greater of:

- (A) 8 square metres per loading dock; or
- (B) 250 square metres in total area; and
- (e) Stormwater from a site used by the City for the storage of snow.

5.9 Combined Sewer Permitted Releases

The following may be Released into a Combined Sewer:

- (a) Wastewater that does not contain;
 - (i) a Hazardous Waste;
 - (ii) a Prohibited Waste; or
 - (iii) a Restricted Waste;
- (b) Stormwater, except Stormwater from:
 - (i) a High Potential Contaminant Release Area; or
 - (ii) roof drainage or foundation drainage on single family or duplex residential premises;
- (c) run-off water resulting solely from:
 - (i) street cleaning;
 - (ii) extinguishing fires;
 - (iii) garden and lawn maintenance; and
 - (iv) washing of single family or duplex residential premises;
- (d) water to which no matter has been added, except from a High Potential Contaminant Release Area;
- (e) roof drainage and Subsurface Water from premises connected for that purpose in accordance with this bylaw;
- (f) water obtained from a source other than EWSI in a volume less than or equal to 1 cubic metre per day; and
- (g) Stormwater from a High Potential Contaminant Release Area treated so that it does not contain:
 - (i) a Hazardous Waste;
 - (ii) a Prohibited Waste; or

(iii) a Restricted Waste; (S. 14, 15, Bylaw 19137, February 19, 2020)

5.10 Sanitary and Combined Sewer Permitted Releases

The following may be Released into a Sanitary Sewer or a Combined Sewer if prior written approval for the Release has been given by EWSI:

- (a) Wastewater, Stormwater or Subsurface Water from a remediation site;
- (b) Stormwater and Subsurface Water from a premises when required;
- (c) a limited quantity of Wastewater containing Prohibited Waste or Restricted Waste, if the Release can be shown to have a minimal adverse effect on the Sewerage System;
- (d) Wastewater from a swimming pool, tank, pond, vessel, reservoir or other containment device or structure if the volume of the device or structure is 10 cubic metres or greater;
- (e) Wastewater from line flushing activity, if the line flushing activity is performed in accordance with the Commercial/Industrial Line Flushing Code of Practice as established in the Drainage Services Guidelines;
- (f) non-residential Wastewater containing a Restricted Waste where it can be demonstrated that the best available technology cannot meet the concentration levels set out in Appendix B;
- (g) non-residential Wastewater containing a Restricted Waste provided that a satisfactory plan to control and reduce the Release of the Restricted Waste has been developed and implemented;
- (h) water obtained from a source other than EWSI in a volume greater than 1 cubic metre per day;
- (i) non-contact cooling water; and
- (j) any other matter that EWSI considers, on reasonable grounds, it is in the public interest to Release to the Sanitary Sewer.

5.11 Storm Sewer Permitted Releases

The following may be Released into a Storm Sewer, Stormwater management facility or Watercourse:

(a) Stormwater or Subsurface Water, except from a remediation site or a High Potential Contaminant Release area, that does not contain:

- (i) a Hazardous Waste;
- (ii) a Prohibited Waste; or
- (iii) a Restricted Waste;
- (b) run-off water resulting solely from:
 - (i) street cleaning;
 - (ii) extinguishing fires;
 - (iii) garden and lawn maintenance; and
 - (iv) washing of single family or duplex residential premises;
- (c) Wastewater resulting from exterior cleaning in a High Potential Contaminant Release Area that has been treated so that it does not contain:
 - (i) a Hazardous Waste;
 - (ii) a Prohibited Waste; or
 - (iii) a Restricted Waste; and
- (d) Stormwater from a High Potential Contaminant Release Area that has been treated so that it does not contain:
 - (i) a Hazardous Waste;
 - (ii) a Prohibited Waste; or
 - (iii) a Restricted Waste.
- (e) Discharge from watermain unidirectional flushing and/or hydrant flushing

5.12 Storm Sewer Permitted Releases requiring EWSI Approval

The following may be Released into a Storm Sewer if prior written approval for the Release has been given by EWSI:

- (a) Stormwater or Subsurface Water from a remediation site:
- (b) Wastewater resulting from the exterior cleaning of buildings, structures or fixtures, other than single family or duplex residential premises, that does not contain:
 - (i) a Hazardous Waste:
 - (ii) a Prohibited Waste; or
 - (iii) a Restricted Waste;

- (c) Wastewater from line flushing activity, if the line flushing activity is performed in accordance with the Commercial/Industrial Line Flushing Code of Practice as established in the Drainage Services Guidelines;
- (d) non-residential Stormwater containing a Restricted Waste provided that a plan to control and reduce the Release of Restricted Wastes has been developed and implemented to the satisfaction of EWSI; and
- (e) any other matter that EWSI considers, on reasonable grounds, it is in the public interest to Release to the Storm Sewer.

5.13 Hauled Wastewater

- (a) No Person shall Release, discharge or permit the Release or discharge of Hauled Wastewater unless the discharge:
 - (i) is made by a Person holding a valid business licence issued by the City with proof of that licence displayed on the vehicle;
 - (ii) is made at a location and in a manner approved by EWSI;
 - (iii) is documented in a manner directed by EWSI;
 - (iv) uses a discharge hose at the approved location placed securely in the discharge portal;
 - (v) either:
 - (A) contains only the matters set out in Article 5.9; or
 - (B) is from solely domestic sources and contains no Hazardous Waste; and
 - (vi) is done in accordance with the Hauled Wastewater Discharge Requirements Code of Practice as established by the Drainage Services Guidelines.
- (b) When the Release or discharge of Hauled Wastewater has been prohibited by EWSI in accordance with these Terms and Conditions, the Person prohibited from releasing or discharging the Hauled Wastewater must provide to EWSI the following information, in writing, within seven days of the prohibition:
 - (i) the name and relevant contact information of the generator of the Wastewater that was prohibited;
 - (ii) the address from which the Wastewater that was prohibited originated;

- (iii) a description of the location and equipment from which the Wastewater that was prohibited was collected;
- (iv) the composition of the Wastewater that was prohibited; and
- (v) the final location at which the Wastewater was Released.

5.14 Residue Disposal

Any Person who treats Wastewater or Stormwater prior to Release to the Sewerage System must:

- (a) dispose of any residue generated in that treatment process in a manner acceptable to EWSI;
- (b) maintain for a minimum of two years accurate records on the amount of residue stored, transported and disposed; and
- (c) provide EWSI with the records kept on the storage, transportation and disposal of the residue upon request.

5.15 Compliance Program

A Person may Release matter in accordance with a compliance program approved by EWSI.

5.16 Release Reporting

- (a) Any Person who Releases or permits the Release of any matter other than those permitted in this Article shall, immediately after becoming aware of the Release, notify:
 - (i) EWSI;
 - (ii) the Owner of the premises from which the Release originated, if known; and
 - (iii) any other Person who may be directly affected by the Release.
- (b) The notification of EWSI shall include:
 - (i) the name of the Person causing or permitting the Release;
 - (ii) the location of the Release;
 - (iii) the name of the Person reporting the Release;
 - (iv) the date and time of the Release;
 - (v) the type of material Released and any associated hazards;
 - (vi) the volume of material Released; and
 - (vii) corrective action taken or anticipated to control the release.

5.17 Release Control

Any Person who Releases or permits the release of any matter other than those permitted in this Article shall, immediately after becoming aware of the Release, take all reasonable steps to:

- (a) confine, remedy and repair the effects of the Release;
- (b) remove or otherwise dispose of the matter in a manner that minimizes any adverse effects; and
- (c) prevent future releases of matter other than those permitted in this Article.

5.18 Owner Report

- (a) The Owner and/or Customer of a premises from which a Release has been reported shall submit a written report to EWSI within seven days of the Release. (S.17, Bylaw 19137, February 19, 2020)
- (b) A report required by this Article shall include:
 - (i) the date and time of the Release;
 - (ii) the location of the Release;
 - (iii) the duration of the Release;
 - (iv) the rate of the Release;
 - (v) composition of the Release, including the composition and amount of each substance in the Release;
 - (vi) the circumstances leading to the Release;
 - (vii) the steps taken to minimize, control or stop the Release;
 - (viii) the procedures that will be implemented to prevent similar Releases in the future:
 - (ix) a summary of any harm caused by the Release; and
 - (x) any other information required by EWSI.

ARTICLE 6 - SURFACE DRAINAGE

6.1 Release of Stormwater and Subsurface Water

The Owner and/or Customer of a premises must control the Release of Stormwater and Subsurface Water when directed to do so by EWSI including:

(S.18, Bylaw 19137, February 19, 2020)

(a) the rate of Release of Stormwater and Subsurface Water to the Sewerage System or any surface drainage feature; and

(b) the location of the Release of Stormwater and Subsurface Water from the premises.

6.2 Compliance with Encumbrances

The Owner and/or Customer of a premises shall comply with the terms and conditions of any restrictive covenant, easement agreement, utility right-of-way or any other document registered on the certificate of title for that premises in which EWSI has an interest, including encumbrances designed to protect: (S.19, Bylaw 19137, February 19, 2020)

- (a) a drainage structure;
- (b) a swale;
- (c) a ditch;
- (d) the overflow area of a Stormwater management facility;
- (e) the stability of a slope; or
- (f) any other surface drainage feature.

ARTICLE 7 - APPLICATIONS, PERMITS AND APPROVALS

7.1 Requirement for Account and Obligation to Pay

Subject to Article 7.5, prior to receiving any Drainage Services from EWSI, an Owner, or Customer is obligated to open an account for water services as required by EPCOR Water Services and Wastewater Treatment Bylaw.

7.2 Applications for Connections

- (a) A Customer applying for new Sewer Service to the premises or an alteration to an existing Sewer Service to the premises must submit the following to EWSI:
 - (i) an application in a form acceptable to EWSI;
 - (ii) the sanitary sewer trunk charge;
 - (iii) any additional charges applicable to the construction or alteration of the Sewer Service; and
 - (iv) any additional information required by EWSI.
- (b) The Owner of a premises other than a single family or duplex residential premises must also submit the following to EWSI when applying for new Sewer Service to the premises or an alteration to an existing Sewer Service to the premises, signed and sealed by a professional acceptable to EWSI:
 - (i) a site mechanical and lot grading plan approved by the City;
 - (ii) an assessment of the potential for the premises to Release contaminated surface water to the Sewerage System, pipe bedding or Watercourse, including:

- (A) all existing information regarding soil contaminants on site;
- (B) all bore hole logs;
- (C) all Subsurface Water and soil sampling data; and
- (D) any other information required by EWSI;
- (iii) an assessment of the potential to Release Wastewater or Stormwater in contravention of this bylaw; and
- (iv) plans for facilities, means and monitoring to prevent soil or Subsurface Water from contaminated sites from adversely affecting or entering the Sewerage System.

7.3 Applications to Release Matter

A Person applying to Release matter into the Sewerage System must submit to EWSI:

- (a) An application in a form acceptable to EWSI; and
- (b) Any fees payable as set out in Schedule 1, Part II;

7.4 Applications for Compliance Program Approval

A Person applying for the approval of a compliance program must submit to EWSI:

- (a) an application in a form acceptable to EWSI;
- (b) the compliance program specifications signed and sealed by a professional acceptable to EWSI; and
- (c) the fee payable for a compliance program approval application as set out in Schedule 1, Part II.

7.5 Applications for Sewer Metering Approval

A Person applying for the approval of sewer metering in place of water metering for the purpose of sanitary utility charges must submit to EWSI:

- (a) an application in a form acceptable to EWSI;
- (b) a report on the proposed sewer metering signed and sealed by a professional acceptable to EWSI; and
- (c) the fee payable for a sewer metering approval application as set out in Schedule 1, Part II.

7.6 Applications for Utility Credit

A Person applying for the approval of credit on their sanitary utility charges or Stormwater utility charges must submit to EWSI:

(a) an application in a form acceptable to EWSI;

- (b) a report showing the evidentiary basis for the credit claimed;
- (c) other information as required by the Terms and Conditions of the Utility Credit Programs; and
- (d) the fee payable for a utility credit application as set out in Schedule 1, Part II

7.7 Compliance with Conditions

The holder of a permit or approval must comply with the terms and conditions imposed on the permit or approval.

EWSI may revoke, suspend or refuse to re-issue, vary, or impose conditions on any permit or approval if, in the opinion of EWSI, the permit or approval holder has failed to comply with the terms and conditions of the permit or approval or for any other reason which in EWSI's sole judgment requires such action.

The onus of proving a permit or approval has been issued in relation to any activity otherwise regulated, restricted or prohibited by the Terms and Conditions is on the Person alleging the existence of such a permit on a balance of probabilities;

The onus of proving that a Person is exempt from the provisions of the Terms and Conditions requiring a permit or approval is on the Person alleging the exemption on a balance of probabilities

7.8 Rejection of Application for Drainage Services

EWSI may, without limitation, reject any Customer's request for Drainage Services when:

- (a) the Customer has not complied with the requirements of the Terms and Conditions;
- (b) the Customer does not have currently in effect all approvals that may be required for the installation of the Sewer Service;
- (c) the Customer refuses to enter into a Drainage Services Agreement or other form of agreement acceptable to EWSI;
- (d) any representation made by the Customer to EWSI for the purpose of obtaining or continuing Drainage Services is, in EWSI's reasonably held opinion, fraudulent, untruthful or misleading;
- (e) the Customer has not, when requested by EWSI to do so, provided a signed written application for Drainage Services;
- (f) the type of Drainage Services or Sewer Service applied for is not available or not normally provided by EWSI in the locality where the Drainage Services are requested;
- (g) the requirements of the Drainage Services Guidelines have not been met;

- (h) the proposed Drainage Services or Service Connection, in EWSI's reasonably held opinion, has unusual characteristics that might adversely affect the quality of Drainage Services supplied to other Customers, public health or safety, the health or safety of EWSI's personnel, or the safety or reliability of any other Facilities or the Sewerage System;
- (i) a previous Customer at the site had a history of non-payment and EWSI believes, on reasonable grounds, that the defaulting Customer would continue to occupy the premises;
- (j) the Customer has an outstanding balance with EWSI for Water or Drainage Services; or
- (k) the Customer has failed to provide the security required by EWSI.

7.9 Customer Contracts

- (a) Drainage Services Agreement
 EWSI may, in its sole discretion, require a Customer previously connected
 or seeking to connect to the Drainage System to sign a Drainage Services
 Agreement in respect of a Service Connection, as a condition of receiving
 or continuing to receive a Service Connection or Drainage Services.
- (b) Assignment of Contractual Obligations
 All Drainage Services, whether or not they require EWSI's assignment consent, that are properly assigned or otherwise transferred to a corporate Customer's affiliate or successor taking over the operation of a Customer's business and operations at premises subject to a pre-existing Account, shall be subject to the terms of the Customer's Drainage Services Agreements and billing history. Any change in service requirements as a result of such assignment or transfer shall be made in accordance with these Terms and Conditions. The existing contractual arrangements will remain in place until any new agreements have been approved and accepted by both parties.

7.10 Authorizations and Approvals for Service Connection

The Customer shall be responsible for obtaining all permits, certificates, licenses, inspections, reports, and other authorizations necessary for the installation and operation of the Service Connection. EWSI shall not be required to commence or continue installation or operation of a Service Connection unless and until the Customer has complied with the requirements of all governmental authorities, permits, certificates, licenses, inspections, reports and other authorizations, all right-of-way agreements, and all of EWSI's requirements applicable to the installation and operation of the Service Connection. EWSI reserves the right to verify that all necessary authorizations have been obtained by Customers.

7.11 Scheduling for Service Connection

EWSI shall schedule Customers for Sewer Service after:

(a) the Customer has complied with EWSI's application requirements;

- (b) the Customer has complied with the requirements of all applicable construction and safety standards, applicable legislation and regulations, including City of Edmonton bylaws; and
- (c) the Customer's application for Drainage Services has been accepted by EWSI.

ARTICLE 8 - DRAINAGE SERVICE REQUIREMENTS AND FACILITIES

8.1 Protection of EWSI's Facilities and Property of Other Customers

(a) No Interference with Facilities

Without prior approval, the Customer shall not install or allow to be installed on property owned or controlled by the Customer any temporary or permanent structures, fences or landscaping that could interfere with the proper and safe access to, or operation of EWSI's Facilities or result in non-compliance with applicable statutes, regulations, standards or codes.

Only an EWSI employee or Authorized Agent shall remove, operate, enter, access, attach, affix to or maintain EWSI Facilities. A Customer shall not obstruct access to or interfere with any Facility or permit the same to be done by any Person other than an employee or authorized agent of EWSI. If a Customer or a Person authorized by a Customer fails to comply with this provision, the Customer is responsible to pay the cost of repairing or otherwise remedying any damage to or loss of Facilities located on the Customer's premises or premises controlled by the Customer, unless caused by circumstances, as determined in EWSI's sole discretion, to have been beyond the Customer's control.

- (b) Deep Ground Disturbance in Proximity to Drainage Facilities
 Any party that proposes any construction involving ground disturbance to a
 depth exceeding two (2) metres within five (5) metres of the boundary of
 lands containing EWSI Facilities is required to enter into a Facility
 Proximity Agreement with EWSI, prior to performing the ground
 disturbance.
- (c) Protection of the Private Drainage System, Equipment and Assets on Customer's Property

The Customer is solely responsible to take all necessary measures to prevent damage to the Private Drainage System and any other equipment or assets connected to the Facilities on the Customer's property due to any cause, including, without limitation, freezing and settlement or movement of the structure or soil through which the Private Drainage System passes. EWSI shall not be liable for any repair, maintenance or replacement of any portion of the Private Drainage System, except where damage to the Private Drainage System is caused by a deliberate or gross negligent act of EWSI.

The Customer shall provide and maintain, at no cost to EWSI, the necessary space and protective barriers to safeguard Facilities installed or to be installed upon the Customer's premises. If the Customer refuses, EWSI may, at its option, provide and maintain such protective barriers, and charge the Customer for these Drainage Services. Such space, and protective barriers shall be in conformity with applicable laws and regulations and subject to EWSI's approval.

- (d) Compliance with Requirements and Use of Service Connection
 The Customer shall ensure that the Private Drainage System and any other
 equipment or assets comply with the requirements of any applicable code
 or regulation and with the Drainage Services Guidelines. The Customer
 shall not use a Service Connection or any Drainage Services received in a
 manner so as to cause interference with any other Customer's use of a
 Service Connection or Drainage Services. At EWSI's request, a Customer
 shall take whatever action is required to correct such interference or
 disturbance at the Customer's expense.
- (e) Customer to Pay Relocation Costs

 The Customer shall pay all costs of relocating EWSI's Facilities at the Customer's request, if such relocation is for the Customer's convenience, or if necessary to remedy any violation of law or regulation caused by the Customer. If requested by EWSI, the Customer shall pay the estimated cost of the relocation in advance.

ARTICLE 9 - EASEMENTS, RIGHTS-OF-WAY, AND USE OF AND ACCESS TO FACILITIES

9.1 Easements and Rights-of-Way

At the request of EWSI an Owner shall grant or cause to be granted to EWSI, without cost to EWSI, such easements or rights-of-way over, upon or under property owned or controlled by the Owner as EWSI reasonably requires for the construction, installation, maintenance, repair, and operation of the Sewerage System.

9.2 Right of Entry

(a) EWSI's employees, agents and other representatives shall have the right to enter a Customer's premises at all reasonable times, or at any time during an event of Force Majeure, for the purpose of installing, maintaining, replacing, testing, monitoring, reading or removing EWSI's Facilities and for any other purpose incidental to the provision of Drainage Services. A Customer shall not prevent or hinder EWSI's entry to the Customer's premises for any such purpose. Without limiting the generality of the foregoing,

EWSI has the right to enter a Customer's premises at any reasonable hour in order to:

- (i) install, inspect, test, repair, replace or remove Facilities;
- (ii) perform necessary maintenance to Facilities;
- (iii) investigate or respond to a Customer complaint or inquiry;
- (iv) conduct an unannounced inspection where EWSI has reasonable grounds to believe that interference with Facilities has occurred or is occurring and
- (v) take necessary corrective action to safeguard and maintain the Drainage System.
- (b) EWSI will make reasonable efforts to notify the Customer in advance of entering a Customer's premises or to notify any other Person who is at the Customer's premises and appears to have authority to permit entry, except:
 - (i) in cases of emergency;
 - (ii) where entry is permitted by order of a court or other authority having jurisdiction;
 - (iii) where otherwise legally empowered to enter;
 - (iv) where the purpose of the entry is in accordance with Article 9 of these Terms and Conditions.
- (c) EWSI may charge a "no access fee" sufficient to cover EWSI's reasonable costs, if EWSI's lawful entry to a Customer's premises is prevented or hindered, whether by a Customer not keeping a scheduled appointment or for any other cause.

9.3 Access to Sewerage System

- (a) A Customer shall be responsible for managing vegetation on the property owned or controlled by the Customer and to maintain adequate clearances to avoid interference with EWSI's Facilities.
- (b) A Customer shall not obstruct or hinder EWSI's free and direct access to any of its Facilities.
- (c) EWSI, in its sole discretion, may consider the presence of a dog to be an obstruction or a hindrance to access to any Facilities and may notify the Customer of any conditions or actions required to enable access to the Facility by appointment with the Customer.
- (d) Where a Customer contravenes any provision of Sections 9.1, 9.2 or 9.3 and fails to remedy such contravention within ten (10) days after receiving from

EWSI a notice in writing to do so, then in addition to any other legal remedy available EWSI may take any steps necessary to remedy the contravention and may charge any costs of so doing to the Customer's Account. These steps include, but are not limited to, turning off water services in accordance with EPCOR Water Services and Wastewater Treatment Bylaw.

9.4 Customer Responsibility for Use of Facilities

A Customer shall not use the Sewerage System in a manner that interferes with any other Customer's use of the Sewerage System. At EWSI's request, the Customer shall take whatever action is required to correct any interference, disturbance or adverse effect at the Customer's expense.

ARTICLE 10 - SEWERAGE SYSTEM EXTENSIONS

10.1 Estimated Cost

Upon a Customer's request for a new or upgraded Service Connection involving construction of new Facilities or an extension to the Sewerage System, EWSI shall prepare a proposal outlining the estimated cost of the Service Connection including all necessary new Facilities or extensions to the Sewerage System.

Where a Customer-requested new or upgraded Service Connection requires cross-lot servicing, EWSI may in its sole discretion decline to construct the Service Connection.

10.2 Agreement in Writing for Sewerage System Extension

A new or upgraded Service Connection involving new Facilities or an extension to the Sewerage System shall not be constructed unless the Customer has executed a Drainage Services Agreement for the proposal with EWSI.

10.3 Customer Payment for Sewerage System Extension Costs

Unless otherwise specified in a Drainage Services Agreement the full cost of any new Facilities or extensions to the Sewerage System shall be paid by the Customer whose new or upgraded Service Connection gives rise to the need for the new Facilities or extension to the Sewerage System.

10.4 Changes to Amount Payable by Customer

Following construction completion, and placing the new Facilities into service pursuant to Article 9 hereof, the amount payable by the Customer will be changed to the actual full cost of the new Facilities. Where the actual full cost exceeds the estimate, EWSI will provide the customer with a written explanation for the change.

ARTICLE 11 - DRAINAGE SERVICE CONNECTIONS

11.1 Engineering, Design and Construction Requirements for Service Connections

- (a) Unless otherwise specified in a written agreement between EWSI and the Customer, it is the Customer's responsibility to supply at the Customer's cost:
 - (i) any plans and engineering reports pertaining to the Service Connection that EWSI may reasonably require, signed and sealed by a Professional Engineer;
 - (ii) an engineering report describing the design, construction and materials proposed, including measures to prevent adverse effects of contaminated soils, groundwater, or adverse soil conditions on the Drainage System;
 - (iii) proof to EWSI's satisfaction, that the Service Connection and the Private Service Line meet all requirements of these Terms and Conditions, the Design and Construction Standards and the Drainage Services Guidelines, and conform to the requirements of all applicable legislation including municipal bylaws and regulations;
- (b) The Customer shall be responsible for the installation and condition of the Private Service Line and all other piping and equipment or any other assets on the Customer's side of the Service Connection Point.
- (c) The Customer shall determine whether he requires any devices to protect his premises or property from damage that may result from the use of a Service Connection or Drainage Services. The Customer shall provide and install any such devices at the Customer's sole expense provided that they do not obstruct or interfere with EWSI's Facilities.

ARTICLE 12 - CHANGES TO SERVICE CONNECTIONS OR OTHER FACILITIES

12.1 Requirement to Give Notice of Changes to Drainage Service Requirements

A Customer shall give to EWSI reasonable prior notice, written or verbally recorded, of any requested change to a Service Connection, to enable EWSI to determine whether or not it can accommodate such revised Drainage Service without changes to other EWSI Facilities.

12.2 Customer to Bear Cost of Changes to EWSI Facilities

If EWSI determines that any modifications, extensions or additions are required to existing Facilities to accommodate:

(a) a Customer's request for change to a Service Connection; or

(b) any material change to a Customer's use of Drainage Services, regardless of whether the Customer requests a change to the Service Connection the Customer is obligated to pay the full cost of such modifications, extensions or additions to Facilities, unless otherwise specified in a Drainage Services Agreement or under the provisions of a water main cost sharing program offered by EWSI.

ARTICLE 13 - GENERAL RESTRICTIONS AND PROHIBITIONS

13.1 Discontinuation of Drainage Service

In addition to any other remedy or penalty, EWSI may discontinue the provision of Drainage Services to any premises if the Customer of that premises is in breach of these Terms and Conditions and no less than forty-eight hours advance notice of the discontinuance is provided to the Customer of the premises.

13.2 Discontinuation of Water Service

In addition to any other remedy or penalty, EWSI may, in its sole discretion, discontinue or limit the provision of water services as provided by EPCOR Water Services and Wastewater Treatment Bylaw to any premises if the Customer of that premises is in breach of these Terms and Conditions and no less than forty-eight hours advance notice of the discontinuance is provided to the Customer of the premises.

13.3 Prohibition of Release

In addition to any other remedy, EWSI may prohibit a Person from releasing or discharging hauled Wastewater if that Person is in breach of these Terms and Conditions.

13.4 Refusal to Approve Plans

In addition to any other remedy or penalty, EWSI may refuse to approve any plans for a premises until the owner of the premises has complied with this bylaw.

13.5 Obstruction

A Person shall not obstruct or hinder any Person in the exercise or performance of the Person's powers pursuant to these Terms and Conditions.

13.6 Contravention of Terms and Conditions

When a Customer or Person contravenes any provision of these Terms and Conditions, in addition to any other legally available remedy, EWSI may take any steps reasonably necessary to remedy the contravention and may charge any costs of so doing to the Customer's or Person's Account.

ARTICLE 14 - LIABILITY AND INDEMNIFICATION

14.1 Limitation of EWSI Liability

- Notwithstanding any other provision of these Terms and Conditions or any provision of any agreement between EWSI and a Customer relating to the provision of Drainage Services (an "EWSI Agreement") EWSI, its directors, officers, agents, employees and representatives ("EWSI Parties") shall not be liable to the Customer, its directors, officers, agents, employees and representatives ("Customer Parties") for any loss, injury, damage, expense, charge, cost or liability of any kind, including without limitation, liability for nuisance or any other tort that does not require a finding of intention or gross negligence, suffered or incurred by the Customer Parties, or any of them, whether of a direct, indirect, special or consequential nature, however or whenever caused, and whether in any way caused by or resulting from the acts or omissions of the EWSI Parties, or any of them, except for direct property damages incurred by the Customer as a direct result of a breach of these Terms and Conditions or applicable EWSI Agreement or other act or omission by an EWSI Party, which breach or other act or omission is caused by the gross negligence or intentional tort of such EWSI Party.
- (b) Any liability under this Section will be limited to an amount in proportion to the degree to which the EWSI Party is determined to be at fault. For the purpose of the foregoing and without otherwise restricting the generality thereof, "direct property damage" shall not include loss of revenue, loss of profits, loss of earnings, loss of production, loss of contract, cost of capital, and loss of use of any Facilities or property, or any other similar damage or loss whatsoever.
- (c) For greater certainty and without limiting the generality of the foregoing, EWSI is not liable for any loss, damage or physical harm to any Person (except where caused by the gross negligence or intentional tort of an EWSI Party) and arising from or caused directly or indirectly, in whole or in part, by any:
 - (i) any failure, defect, fluctuation, reduction or interruption in the provision of Drainage Services by EWSI to its Customers, whether resulting from the break or malfunction of any sewer main, service, Private Service Line or attachment, or from the interruption in or cessation of Drainage Services Connection with the repair or proper maintenance of the Drainage System.
- (d) All limitations, protections and exclusions of liability contained in any provincial or federal legislation are in addition to and not in derogation of or substitution for the limitations of EWSI's liability contained in these Terms and Conditions.

14.2 Release

Subject to Section 14.1 above, none of the EWSI Parties (as defined above) will be liable to any of the Customer Parties (as defined above) for any damages, costs, expenses, injuries, losses, or liabilities suffered or incurred by the Customer Parties or any of them, however and whenever caused, and each Customer Party hereby forever releases each of the EWSI Parties from any liability or obligation in respect thereof.

14.3 EWSI Not Liable to Customer

For greater certainty and without limitation to the provisions of Sections 14.1 and 14.2, EWSI Parties shall not be liable to a Customer for any damages of any kind (except to the extent the damages are caused by the gross negligence or intentional tort of an EWSI Party) caused by or arising from any EWSI Party's act in compliance with, or as permitted by, these Terms and Conditions, a Drainage Services Agreement, or any legal or regulatory requirement related to provision of Drainage Services.

14.4 Customer Liability

- (a) In addition to any other liability provisions set out in these Terms and Conditions or any provision in a Drainage Services Agreement or any other agreement between a Customer and EWSI, a Customer Party (as defined above) shall be liable for any damages, costs, expenses, injuries, losses, or liabilities suffered or incurred by EWSI Parties (as defined above), whether of a direct or indirect nature, caused by or arising from any acts or omissions of a Customer Party that result in a breach ("Breach") of these Terms and Conditions or the applicable agreement, or any negligent or wilful acts or omissions of harm of a Customer Party whether or not they constitute a Breach.
- (b) A Customer shall indemnify and hold EWSI and its employees and agents harmless from and against any claim (including any claim by another Customer of EWSI) for any loss, damage, expense, charge, cost (including legal fees), fine, penalty or other liability of any kind suffered or incurred by EWSI arising out of or in any way connected with:
 - (i) any failure by the Customer to comply with these Terms and Conditions;
 - (ii) any damages to EWSI's Facilities or the facilities of another Customer caused by equipment installed or actions taken or failed to be taken by the Customer;
 - (iii) any claim, damages, or loss suffered by the Customer as a result of any act or omission of an agent acting for such Customer.
- (c) Any claim by a Customer for direct losses, damages, expenses, charges, costs or other liabilities not barred or restricted under these Terms and Conditions must be communicated in writing to EWSI within 180 days

from the date of occurrence of the incident giving rise to the claim or the date on which the Customer ought reasonably to have become aware of the occurrence or incident, failing which EWSI shall have no liability or responsibility whatsoever to the Customer in respect of the claim.

14.5 Force Majeure

(a) Force Majeure Relief

If an event or circumstance of Force Majeure occurs that affects EWSI's ability to provide a Service Connection or Drainage Services, EWSI's obligations and responsibilities hereunder and under any agreement relating to Service Connections or provision of Drainage Services, so far as they are affected by the Force Majeure or the consequences thereof, shall be suspended until such Force Majeure or the consequences thereof are remedied and for such period thereafter as may reasonably be required to restore the Service Connection or Drainage Services. Flat Monthly Service Charges, if applicable, will continue to be payable during the period in which EWSI claims relief by reason of Force Majeure.

(b) Notice

EWSI shall where practicable give notice of an event of Force Majeure to Customers affected and shall where practicable give notice to Customers affected when the Force Majeure event ceases to prevent performance of EWSI's obligations.

(c) Obligation to Remedy

EWSI shall promptly remedy the cause and effect of the Force Majeure insofar as it is reasonably able to do so.

(d) Strikes and Lockouts

Notwithstanding any other provision of these Terms and Conditions, the settlement of any strike, lockout or other industrial disturbance shall be wholly in the discretion of EWSI and EWSI may settle such strike, lockout or industrial disturbance at such time and on such terms and conditions as it may deem appropriate. No failure or delay in settling such strike, lockout or industrial disturbance shall constitute a cause or event within the control of EWSI or deprive EWSI of the benefits of this Section 14.5.

ARTICLE 15 - ADDITIONAL PROVISIONS RELATING TO DRAINAGE SERVICES

15.1 Ownership of Facilities

EWSI remains the owner of all Facilities necessary to provide Drainage Services to Customers or Owners, to and including the Service Connection Point, unless a written agreement between EWSI and a Customer specifically provides otherwise. Payment made by a Customer for costs incurred by EWSI in installing Facilities does not entitle the Customer to ownership of any such

Facilities, unless a written agreement between EWSI and the Customer specifically provides otherwise.

15.2 Proper Use of Drainage Services

The Customers assume full responsibility for the proper use of the Service Connection and Drainage Services provided by EWSI and for the condition, suitability and safety of any and all Facilities on the Customer's premises or on premises owned by the Customer or premises controlled but not owned by the Customer. The Customer shall be liable for any loss, damage, expense, charge, cost or other liability of any kind, whether to EWSI, its agents or employees, EWSI property or otherwise, arising directly or indirectly by reason of

- (a) the routine use of the Drainage System,
- (b) the Customer's improper or negligent use of Drainage Services, Sewer Service Facilities, or the Sewerage System; or
- (c) the negligent acts or omissions or wilful acts or omissions of the Customer or any Person permitted on the Customer's property.

15.3 Compliance with Applicable Legal Authorities

EWSI and all Customers are subject to, and shall comply with, all applicable federal, provincial and local laws, and all applicable orders or other actions of governmental authorities having jurisdiction. EWSI's obligation to provide or continue to supply a Service Connection or Drainage Services or otherwise terminate Drainage Services, in respect of any Customer, is subject to the condition that all requisite governmental and regulatory approvals for the supply or continued provision of the Service Connection or Drainage Services or or termination are obtained and in force.

15.4 Powers of EWSI

Without restricting any other power, duty or function in this bylaw EWSI may:

- (a) carry out any inspection to determine compliance with this bylaw;
- (b) take any steps or carry out any actions required to enforce this bylaw;
- (c) take any steps or carry out any actions required to remedy a contravention or release which, in EWSI's reasonable opinion, appears to be a contravention of this bylaw;
- (d) establish areas where activities restricted by this bylaw are permitted;
- (e) establish forms for the purpose of this bylaw;

- (f) issue permits and approvals with such terms and conditions as are deemed appropriate;
- (g) establish criteria to be met for a permit or approval to be issued pursuant to this bylaw;
- (h) waive or vary any fee payable pursuant to this bylaw; and
- (i) delegate any powers, duties or functions under this bylaw to an employee of EWSI.

15.5 Interference with EWSI's Property

No one other than an EWSI employee or Authorized Agent shall be permitted to remove, operate, enter, access, affix to or maintain Facilities owned by EWSI. A Customer shall not interfere with or alter Facilities or permit the same to be done by any Person other than the authorized agents or employees of EWSI.

15.6 Drainage Services Interruptions and EWSI Obligation to Respond

- (a) While EWSI takes all reasonable efforts to guard against Drainage Services interruptions, it does not guarantee uninterrupted Drainage Services or any particular standard of Drainage Services. EWSI shall at any time, without liability whatsoever to any Customer, have the right to discontinue or otherwise curtail, interrupt or reduce Drainage Services to Customers whenever EWSI reasonably determines, or when EWSI is directed by an authority having jurisdiction, that such discontinuance curtailment, interruption or reduction is:
 - (i) necessary to facilitate construction, installation, maintenance, repair, replacement or inspection of any of EWSI's Facilities;
 - (ii) necessary to facilitate a Customer's construction, installation, maintenance, repair or replacement of its infrastructure used to for Drainage Services;
 - (iii) pursuant to non payment of amounts due and payable on a Customer's Account;
 - (iv) necessary to maintain safety and reliability of the Sewerage System; or
 - (v) due to any other reason including: dangerous or hazardous circumstances, emergencies, forced outages, or Force Majeure.
- (b) EWSI shall use reasonable efforts to:
 - (i) provide notice of any Drainage Services reduction or interruption;

- (ii) minimize such interruption duration and occurrences;
- (iii) schedule planned interruptions as much as possible at times convenient to Customers; and
- (iv) restore extended Drainage Service interruptions due to sewer main breaks, plugged or collapsed sewer lines or other reasons as soon as practicable.
- (c) EWSI is obligated to make reasonable efforts to respond to a Customer requested service call within a reasonable time, and to minimize Drainage Service interruptions to Customers. The Customer shall pay the cost of a Customer-requested service call and all related work if the cause of the problem is outside the Sewerage System and is not the direct result of an act or omission of an employee, contractor or agent of EWSI that is grossly negligent or an intentional tort.
- (d) Either EWSI or the City, or both of them jointly, may at any time issue an Order directing all Customers to cease or restrict use of the Sewerage System in the manner and for the period of time specified in the Order, and may cause such Order to be publicly disseminated via print or electronic media or by posting on the websites of EWSI or the City. A Customer is deemed to have received notice of such Order and to be aware of its content 24 hours after it is publicly disseminated, or at such sooner time as a copy of the Order is delivered to the Customer's service address as shown in the Customer's account by an employee, agent or other representative of EWSI or of the City.

15.7 Assignments

- (a) A Customer shall not assign any of its rights or obligations under these Terms and Conditions or a Drainage Services Agreement or any other agreement with EWSI relating to a Service Connection or Drainage Services without obtaining any necessary regulatory approvals and EWSI's approval where required in such agreement. No assignment shall relieve the Customer of any of its obligations under these Terms and Conditions until such obligations have been assumed by the assignee and EWSI has agreed to the assignment and novation. Any purported assignment by a Customer in violation of this section shall be void.
- (b) EWSI may assign all or any part of its rights or obligations under these Terms and Conditions or a Drainage Services Agreement, or any entitlement to payment under any Customer Account, to any Person with or without notice to the Customer.

15.8 No Waiver

The failure of EWSI or a Customer to insist upon strict performance of any provision of these Terms and Conditions or a Drainage Services Agreement or any other agreement between EWSI and the Customer relating to a Service Connection or Drainage Services, or to take advantage of any of its rights arising therefrom, shall not be construed as a waiver of any such provisions or the relinquishment of any such right or rights. No provision of these Terms and Conditions or a Drainage Services Agreement or any other agreement between EWSI and a Customer relating to a Service Connection or Drainage Services shall be deemed to have been waived, and no breach thereof shall be deemed to have been excused, unless such waiver or consent to excuse is in writing and signed by the party claimed to have waived or consented to excuse.

15.9 Law

- (a) These Terms and Conditions and any Drainage Services Agreement or other agreement between EWSI and a Customer relating to a Service Connection or Drainage Services shall be governed by the laws of the Province of Alberta and the federal laws of Canada applicable in the Province of Alberta, without regard to principles of conflicts of law. Any legal proceedings arising in connection with these Terms and Conditions or any other agreement relating to a Service Connection or Drainage Services shall be brought in the courts of the Province of Alberta.
- (b) Nothing in these Terms and Conditions, including the issuance of a permit, any approval, and any inspections conducted by EWSI, relieves any Person of their legal duty to comply with these Terms and Conditions.

Appendix A – Prohibited Wastes

The following are designated as Prohibited Wastes:

- 1. any matter in a concentration that may cause a hazard to human health;
- 2. any flammable liquid or explosive matter that, by itself or in combination with another substance, is capable of causing or contributing to an explosion or supporting combustion;
- 3. any matter that by itself or in combination with another substance is capable of obstructing the flow of or interfering with the operation or performance of the Sewerage System, Watercourse, or treatment facility including but not limited to:
 - a. agricultural wastes;
 - b. animals, including fish and fowl or portions thereof that will not pass a two centimetre screen:
 - c. ashes;
 - d. asphalt;
 - e. concrete and cement based products;
 - f. gardening wastes;
 - g. glass;
 - h. gravel, into the sanitary Sewerage System;
 - i. metal;
 - j. hair and hair clippings;
 - cardboard and paper, excluding toilet tissue into the Sanitary Sewer or Combined Sewer;
 - l. plastics;
 - m. personal hygiene products;
 - n. rags, paper towels and cloth;
 - o. rock;
 - p. sediment, into the sanitary Sewerage System; (S.20, Bylaw 19137, February 19, 2020)
 - q. sharps;
 - r. soil;
 - s. straw;

- t. tar;
- u. wash water from washing equipment used in the mixing and delivery of concrete and cement based products;
- v. wood, and wood sawdust or shavings;
- w. grit or skimmings from interceptors, catch basins, pretreatment facilities or private Wastewater disposal systems; or
- x. sludge from interceptors, catch basins, pretreatment facilities or private Wastewater disposal systems;
- 4. any matter with corrosive properties that, by itself or in combination with another substance, may cause damage to any Sewerage System or treatment facility;
- 5. any matter, other than domestic Wastewater, that by itself or in combination with another substance is capable of creating an air pollution problem outside a Sewerage System or in and around a treatment facility;
- 6. any matter that, by itself or in combination with another substance, is capable of preventing safe entry into a Sewerage System or treatment facility;
- 7. any matter that:
 - a. consists of two or more separate liquid layers; or
 - b. is capable of forming a separate liquid layer when it comes in contact with Stormwater or Wastewater:
- 8. any matter that, by itself or in combination with another substance, is detrimental to the operation or performance of the Sewerage System, Watercourse, treatment facility, or the environment, including but not limited to:
 - a. biological waste;
 - b. elemental mercury;
 - c. paint, stains and coatings, including oil and water based;
 - d. prescription drugs and any other pharmaceutical products;
 - e. pesticides and herbicides; and
 - f. used automotive and machine oils and lubricants;
- 9. radioactive material in solid form;
- 10. effluent from an industrial garbage grinder;
- 11. any matter that has the potential to:

- a. cause a hazard to human health and that cannot be effectively mitigated by Wastewater treatment;
- b. cause a hazard to the environment;
- c. cause a hazard to workers responsible for operating and maintaining the Sewerage System or a treatment facility;
- d. cause an adverse effect to the Sewerage System;
- e. cause an adverse effect to a treatment facility;
- f. result in the Wastewater being Released by the treatment facility in contravention of regulatory requirements; or
- g. restrict the beneficial use of biosolids from a treatment facility.
- 12. any matter that contains a Biohazardous Agent, Risk Group 4.

Appendix B – Restricted Wastes Applicable to Sanitary and Combined Sewers

The following are designated as Restricted Wastes when present in Wastewater, Stormwater, or Subsurface Water being Released to a Sanitary or Combined Sewer in excess of the limits set out below.

Unless expressed otherwise, concentrations are expressed as total concentrations.

Notwithstanding any limit set out below, EWSI may require or allow a premises to adhere to site-specific limits where EWSI determines it appropriate to do so. (S.21, Bylaw 19137, February 19, 2020)

1. CONTAMINANTS

Contaminant	Concentration (mg/L)
Biochemical oxygen demand (B.O.D.)	10,000
Chemical oxygen demand (C.O.D.)	20,000
Oil and grease	500
Phosphorus (P)	200
Suspended solids (S.S.)	5,000
Total Kjeldahl nitrogen (T.K.N.) or Ammonia (S.22, Bylaw 19137,	500
February 19, 2020)	300

2. INORGANIC CONSTITUENTS

Inorganic Constituent	Concentration (mg/L)
Antimony	5.0
Arsenic (As)	1.0
Cadmium (Cd)	0.10
Chlorine (total) (Cl ₂)	5.0
Chromium (hexavalent) (Cr ⁺⁶)	2.0
Chromium (total) (Cr)	4.0
Copper (Cu)	1.0
Cyanide (CN ⁻)	2.0
Lead (Pb)	1.0
Mercury (Hg)	0.10
Molybdenum (Mo)	5.0
Nickel (Ni)	4.0
Silver (Ag)	5.0
Selenium (Se)	1.0
Sulphide (S=)	3.0
Thallium (Tl)	1.0
Zinc (Zn)	2.0

3. ORGANIC COMPOUNDS

Organic Compound	Concentration (mg/L)
Hydrocarbons	100
Phenols	1.0

4. pH

pH (Hydrogen ion) less than 6.0 or greater than 11.5

5. TEMPERATURE

temperature greater than 75 degrees Celsius

6. OTHER

a. radioactive material in a concentration greater than allowed under the *Nuclear Safety and Control Act*, SC 1997, c 9 and associated regulations;

Appendix C – Restricted Wastes Applicable to Storm Sewers and Watercourses

The following are designated as Restricted Wastes when present in Wastewater, Stormwater, or Subsurface Water being Released to the Storm Sewer or a Watercourse in excess of the limits set out below.

Unless expressed otherwise, concentrations are expressed as total concentrations.

Notwithstanding any limit set out below, EWSI may require a premises to adhere to site-specific limits where EWSI determines it appropriate to do so.

1. CONTAMINANTS

Contaminant	Concentration (mg/L)
Biochemical oxygen demand (B.O.D.)	50
Chemical oxygen demand (C.O.D.)	100
Oil and grease	15
Phosphorus (P)	1.0
E.coli.	200 MPN / 100 mL or 200 counts / 100 mL

2. INORGANIC CONSTITUENTS

Inorganic Constituent	Concentration (mg/L)
Ammonia Nitrogen (NH3-N)	1.4
Arsenic (As)	0.050
Cadmium (Cd)	0.0005
Chlorine (total) (Cb)	0.020
Chromium (hexavalent) (Cr ⁺⁶)	0.010
Chromium (total) (Cr)	0.089
Copper (Cu)	0.160
Cyanide (CN ⁻)	0.050
Lead (Pb)	0.020
Mercury (Hg)	0.00013
Nickel (Ni)	0.080
Silver (Ag)	0.001
Selenium (Se)	0.010
Thallium (Tl)	0.008
Zinc (Zn)	0.30

3. ORGANIC COMPOUNDS

Organic Compound	Concentration (mg/L)
Benzene	0.37
Ethylbenzene	0.090
Toluene	0.039
Xylene	0.5

Terms and Conditions of Drainage Service

Organic Compound	Concentration (mg/L)
Carbon tetrachloride	0.0133
Phenols	0.005
Tetrachloroethylene	0.0044
Trichloroethylene	0.0076

⁽S.24, Bylaw 19137, February 19, 2020)

4. pH

pH less than 6.0 or greater than 9.0, except uncontaminated runoff resulting from natural precipitation

5. TEMPERATURE

temperature greater than 60 degrees Celsius

6. OTHER

- a. dye or colouring material that produces a colour value greater than or equal to 50 true colour units, or that causes discolouration of the dye containing water so that the colour cannot be determined by the visual comparison method, except where the dye is used by EWSI as a tracer;
- b. radioactive material in a concentration greater than allowed under the *Nuclear Safety and Control Act*, SC 1997, c 9 and associated regulations;
- c. foam or any other matter that, by itself or in combination with another substance, is capable of producing foam that will persist for five minutes or more, with the exception of foam used in a Wastewater treatment facility;

Schedule 3

Performance Based Rates: Sanitary, Stormwater and Wastewater Treatment Rates

1.0	3-Year Term with Annual Adjustments Effective Each April 1st	1
1.1	Variable Rate and Consumption Charges	1
1.2	Fixed and Flat Monthly Service Charges and Service Fees and Charges	1
1.3	Wastewater Overstrength Surcharges	2
2.0	Routine Adjustments	3
2.1	Inflation Factor	3
2.2	Efficiency Factor	5
2.3	Special Rate Adjustments for Sanitary, Stormwater and Wastewater Treatment Services.	5
2.4	Non-routine Adjustments	11
2.5	Sanitary Sewer Trunk Charge	11
3.0	Drainage Services Quality	12
3.1	Environmental Index	14
3.2	Customer Service Index	18
3.3	System Reliability and Optimization Index	23
3.4	Safety Index	29
4.0	Wastewater Treatment Service Quality	34
4.5	Water Quality and Environmental Index	35
4.6	Customer Service Index	39
4.7	System Reliability and Optimization Index	41
4.8	Safety Index	44
5.0	Non-Routine Adjustments	48
5.1	Changes to Legislation, Regulation or Taxes	49
5.2	Consequences of Force Majeure	49
5.3	Deterioration of Drainage or Wastewater Treatment Systems	49
5.4	Customer – initiated or City – initiated System Expansion	49
5.5	City - initiated Relocations of Drainage Assets	50
5.6	Franchise Agreement	50
5.7	City Initiatives	50
5.8	Flood Mitigation	50
5.9	Grant Funding	50
6.0	Off-Ramp	50
7.0	Reporting and Filing Requirements	50
7.1	Rate Sheets	51
7.2	Drainage and Wastewater Treatment Service Quality Results	51
7.3	Consumption Deferral Account	51

1.0 3-Year Term with Annual Adjustments Effective Each April 1st

This Schedule 3 sets out the Performance Based Regulation Plan and applies in respect of adjustments to the rates, fees and charges as set out in Schedule 1, under this bylaw for the period from April 1, 2022- March 31, 2025.

The rates and each component of, or adjustment to, the rates as set out below will be assessed on a calendar year basis. However, to meet the administrative requirements of compiling, verifying and reporting on results, actual rate adjustments will occur on April 1st of the year following the forecast year.

1.1 Variable Rate and Consumption Charges

The variable rate charges and consumption charges for the first year of the three-year term, commencing April 1, 2022 are set out in Schedule 1 Parts I and III. Commencing April 1, 2023 and for each subsequent year on that date for each customer class billed for Sanitary Utility Service, Stormwater Utility Service, and/or Residential or Commercial Wastewater Treatment Service identified in Schedule 1 Part I, Sanitary and Stormwater Rates, or Part III Wastewater Treatment Service, the consumption or variable charge shall be adjusted. For each customer or customer class, the rate for the year in which the April 1st adjustment takes effect (hereinafter called the "Current Year") will be determined by the formula:

$$RP X (1 + ID) X (1 + IF - E) + RS$$

Where,

- RP means the rate that was in effect for a customer or customer class during the 12 months immediately preceding April 1 of the Current Year;
- ID means the difference between the forecast rate of inflation and the actual rate of inflation for the calendar year immediately preceding the Current Year;
- IF means the forecast rate of inflation for the Current Year;
- E means the efficiency factor as described in Section 2.2. of this Schedule 3.
- RS means the rate for a special rate adjustment as described in Sections 2.3 and 2.4 of this Schedule 3.

1.2 Fixed and Flat Monthly Service Charges and Service Fees and Charges

The fixed and flat monthly service charges and the Service Fees and Charges for the first year of the three-year term, commencing April 1, 2022 are set out in Schedule 1, Parts I, II and III. Commencing

April 1, 2023 and for each subsequent year on that date, the Flat Monthly Charge for Sanitary Utility Service in Schedule 1, Part I, the Fixed Monthly Service Charge for Residential or Commercial Wastewater Treatment Service in Schedule 1, Part III and the Service Fees and Charges in Schedule 1, Part II shall be adjusted. For each customer or customer class, the rate for the year in which the April 1st adjustment takes effect (hereinafter called the "Current Year") will be determined by the formula:

$$RP X (1 + ID) X (1 + IF - E) + RS + Z$$

Where,

- RP means the rate, fee or charge that was in effect for a customer or customer class during the 12 months immediately preceding April 1 of the Current Year, before any non-routine adjustments are applied,
- ID means the difference between the forecast rate of inflation and the actual rate of inflation for the calendar year immediately preceding the Current Year,
- IF means the forecast rate of inflation for the Current Year,
- E means the efficiency factor as described in Section 2.2. of this Schedule 3.
- RS means the rate for a special rate adjustment as described in Sections 2.3 and 2.4 of this Schedule 3.
- Z means a non-routine adjustment as described in Section 5.0 of this Schedule 3.

1.3 Wastewater Overstrength Surcharges

The Wastewater Overstrength Surcharges for the first year of the three-year term, commencing April 1, 2022 are set out in Schedule 1, Part III. Commencing April 1st, 2023 and for each subsequent year on that date, the Wastewater Overstrength Surcharge and Wastewater Additional Overstrength Surcharge identified in Schedule 1 Part III – Wastewater Treatment Rates, shall be adjusted. For each customer class, the rate for the year in which the April 1st adjustment takes effect (hereinafter called the "Current Year") will be determined by the formula:

$$RP X (1 + ID) X (1 + IF - E) + RS$$

Where,

- RP means the rate that was in effect during 12 months immediately preceding April 1 of the Current Year;
- ID means the difference between the forecast rate of inflation and the actual rate of inflation for the calendar year immediately preceding the Current Year;

- IF means the forecast rate of inflation for the Current Year;
- E means the efficiency factor as described in Section 2.2. of this Schedule 3.
- RS means the rate for a special rate adjustment as described in Section 2.4 of this Schedule 3.

2.0 Routine Adjustments

Each year, the following factors or adjustments will be used to determine appropriate adjustments to the variable rate charges, the fixed and flat monthly service charges, the service fees and charges and the wastewater overstrength surcharges payable for Drainage and Wastewater Treatment Services:

- a) Inflation Factor;
- b) Efficiency Factor;
- c) Special Rate Adjustments.

The calculation and application of these factors or adjustments are described in subsections 2.1 to 2.4 below.

2.1 Inflation Factor

The flat and variable rates and charges and the service fees and charges for Drainage Services will be subject to an annual adjustment based upon a forecast of the rate of inflation supported by the Conference Board of Canada's forecast inflation for the upcoming year. For the purposes of this adjustment calculation, "inflation" will be determined on the basis of two components:

- a) a Consumer Price Index ("CPI") component, weighted at 40%, based on the annual Conference Board of Canada's forecast for Statistics Canada CANSIM Services V41694625 CPI, 2005 Basket, 2002 = 100, Alberta, All Items; and
- b) a Labour Cost component, based on the annual Conference Board of Canada's forecast for Statistics Canada CANSIM Series V1603533, weighted at 60%.

The fixed monthly service charge, consumption charges, wastewater overstrength surcharges and wastewater additional overstrength surcharges for Wastewater Treatment Services will be subject to an annual adjustment based upon a forecast of the rate of inflation supported by the Conference Board of Canada's forecast inflation for the upcoming year. For the purposes of this adjustment calculation, "inflation" will be determined on the basis of two components:

- a) a Consumer Price Index ("CPI") component, weighted at 65%, based on the annual Conference Board of Canada's forecast for Statistics Canada CANSIM Services V41694625 CPI, 2005 Basket, 2002 = 100, Alberta, All Items; and
- b) a Labour Cost component, based on the annual Conference Board of Canada's forecast for Statistics Canada CANSIM Series V1603533, weighted at 35%.

Once the calendar year is complete and the actual rate of inflation is known, the charges for the subsequent year will include an adjustment to correct for the difference between the forecast and actual rate of inflation for the calendar year. As the index utilized for the actual Labour Cost component may not be available for the complete calendar year, the consecutive 12 month period for which the index utilized for the Labour Cost component is most recently available is used as a substitute for the calendar year for purposes of the Labour Cost component inflation adjustment.

Both CPI and the Labour Cost components are available and verifiable:

- 1. The actual CPI component for a given year will be the change in the CPI for Alberta. This measure is identified as the annual growth in Consumer Price Index (CPI): Statistics Canada CANSIM Series V41694625 CPI, 2005 Basket, 2002 = 100, Alberta, All Items. Any publication issued by Statistics Canada which is intended to replace, supersede or otherwise revise this measure will be used in substitution for it, in performing the inflation calculation.
- 2. The actual labour cost component for a given year will be the annual growth in Average Hourly Earnings (AHE) for salaried employees (paid a fixed salary), including overtime, unadjusted for seasonal variation for selected industries classified using the North American Industry Classification System (NAICS), for Alberta, Industrial Aggregate (excluding unclassified businesses), based on the monthly Statistics Canada CANSIM Series V1603533. The annual growth in the AHE will be calculated based on the year-over-year percentage change from the AHE in the preceding year to the AHE in the given year, where:
 - AHE in the given year is the average of the most recent twelve consecutive months of series V1603533 available (and not including preliminary data) when EWSI finalizes its annual rate application for submission to the City Manager on or before March 1; and
 - AHE in the preceding year is the average of the preceding twelve consecutive months of series V1603533.

Any publication issued by Statistics Canada which is intended to replace, supersede or otherwise revise this measure will be used in substitution for it, in performing the inflation calculation.

As an exception to the inflation adjustment factor, if the rate of inflation (calculated in accordance with this section) is 1.75% or lower, EWSI may prepare a financial plan to demonstrate the need for a unit rate increase other than 1.5%. The inflation rate in the financial plan will be a surrogate for the value of I_D.

As a further exception to the inflation adjustment factor, if the rate of inflation is greater than 5.0%, EWSI may prepare a financial plan demonstrating the appropriateness of a unit rate increase less than the rate of inflation minus 0.25%. The inflation rate in the plan will be a surrogate for the value of I_D.

2.2 Efficiency Factor

The Efficiency Factor for the 2022-2024 PBR term for Wastewater Treatment fixed monthly service charges and consumption charges, wastewater overstrength surcharges and wastewater additional overstrength surcharges shall be 0.25%.

The Efficiency Factor for the 2022-2024 PBR term for Sanitary Utility flat monthly service charges, Sanitary Utility variable monthly charges and Stormwater Utility rates shall be 0.50%.

2.3 Special Rate Adjustments for Sanitary, Stormwater and Wastewater Treatment Services

2.3.1 Special Rate Adjustments for Re-Basing – Drainage

In each of the years 2022, 2023 and 2024 (affecting sanitary and Stormwater utility rates and Flat Monthly Service Charges payable by Customers for the time periods April 1, 2022- March 31, 2023, April 1, 2023 to March 31, 2024, April 1, 2024 – March 31, 2025) the Special Rate Adjustment for Re-Basing for Drainage Services will be added to the sanitary and Stormwater Variable Rate Charges and the Flat Monthly Service Charges in Schedule 1, Part I – *Sanitary and Stormwater Rates*. These Special Rate Adjustments for Re-Basing are required to recover the difference between EWSI's revenue requirement forecast for the 2022-2024 PBR term and the revenue that would be realized if annual rate increases were limited to PBR inflation.

The Special Rate Adjustments for Re-Basing for Sanitary and Stormwater Services will be applied in respect of 2022, 2023 and 2024 Sanitary and Stormwater rates after the Inflation and Efficiency factors have been calculated and applied for those years, and are in addition to any Non-Routine Adjustments applicable to those years. Each year, after the Special Rate Adjustments for Re-Basing for Sanitary and Stormwater Services have been factored into the 2022, 2023 and 2024 rates and charges, these adjustments will continue to form part of the basic Variable Charges and Flat Monthly Service Charges in all subsequent years, to which the annual Routine Adjustment Factors set out in subsections 2.1 and 2.2 above will be applied.

The Special Rate Adjustments for Re-Basing for Sanitary and Stormwater Services applied to the Sanitary and Stormwater Rates and to the Flat Monthly Service Charges for the years 2022, 2023 and 2024 are as follows:

Stormwater Utility Rate	2022 Special Rate	2023 Special Rate	2024 Special Rate
	Adjustment	Adjustment	Adjustment
	\$(0.002805)	\$0.000978	\$0.001009

Sanitary Utility Rate	2022 Special Rate Adjustment	2023 Special Rate Adjustment	2024 Special Rate Adjustment
All Premises (except large wholesale)	\$(0.06096)	\$0.02110	\$0.02191
Large Wholesale with Collection System	\$(0.03414)	\$0.01181	\$0.01227

Sanitary Utility Flat Monthly Service Charge (based on meter size)	2022 Special Rate Adjustment	2023 Special Rate Adjustment	2024 Special Rate Adjustment
16mm	\$(0.61)	\$0.22	\$0.22
20mm	\$(1.10)	\$0.39	\$0.40
25mm	\$(1.71)	\$0.61	\$0.62
40mm	\$(3.30)	\$1.17	\$1.19
50mm	\$(4.53)	\$1.60	\$1.63
75mm	\$(9.35)	\$3.31	\$3.36
100mm	\$(17.42)	\$6.16	\$6.27
150mm	\$(32.94)	\$11.65	\$11.85
200mm	\$(52.56)	\$18.59	\$18.91
250mm	\$(130.44)	\$46.13	\$46.93
300mm	\$(130.44)	\$46.13	\$46.93
400mm	\$(142.73)	\$50.48	\$51.35
500mm	\$(153.68)	\$54.35	\$55.29

The Special Rate Adjustments for re-basing Stormwater and sanitary rates and charges for 2022 have been included in the Sanitary and Stormwater Rates in Schedule 1, Part I.

2.3.2 Special Rate Adjustments for Re-Basing - Wastewater

In each of the years 2022, 2023 and 2024 (affecting wastewater treatment rates payable by Customers for the time periods April 1, 2022 – March 32, 2023, April 1, 2023 to March 31, 2024, April 1, 2024 – March 31, 2025) the Special Rate Adjustment for Re-Basing for Wastewater Treatment Services will be added to the Consumption Charge, Fixed Monthly Service Charge, the Wastewater Overstrength Surcharge, and the Wastewater Additional Overstrength Surcharge in Schedule 1, Part III – Wastewater Treatment Rates. This Special Rate Adjustment for Re-Basing is required to recover the difference between EWSI's revenue requirement forecast for the 2022-2024 PBR term and the revenue that would be realized if annual rate increases were limited to PBR inflation.

The Special Rate Adjustment for Re-Basing for Wastewater Treatment Services will be applied in respect of 2022, 2023 and 2024 wastewater treatment rates after the Inflation and Efficiency factors have been calculated and applied for those years, and are in addition to any Non-Routine Adjustments applicable to those years. Each year, after the Special Rate Adjustment for Re-Basing for Wastewater Treatment Services have been factored into the 2022, 2023 and 2024 wastewater treatment rates, these adjustments will continue to form part of the basic Consumption Charge, Fixed Monthly Service Charge, and Wastewater Overstrength and Wastewater Additional Overstrength Surcharges for Wastewater Treatment Services in all subsequent years, to which the annual Routine Adjustment Factors set out in subsections 2.1 and 2.2 above will be applied.

The Special Rate Adjustment for Re-Basing for Wastewater Treatment Services applied to wastewater treatment rates for the years 2022, 2023 and 2024 applied to the Consumption Charge for each customer class, the Fixed Monthly Service Charge and Wastewater Overstrength and Wastewater Additional Overstrength Surcharges is as follows:

Consumption Charge (per m³)	2022 Special Rate Adjustment	2023 Special Rate Adjustment	2024 Special Rate Adjustment
Residential			
All consumption	\$0.1777	\$(0.0077)	\$(0.0078)
Multi-Residential	\$0.1777	\$(0.0077)	\$(0.0078)
Commercial			
$0 - 10,000 \text{ m}^3$	\$0.1777	\$(0.0077)	\$(0.0078)
$10,000.1 - 100,000 \text{ m}^3$	\$0.1375	\$(0.0059)	\$(0.0060)
Over 100,000 m ³	\$0.0717	\$(0.0031)	\$(0.0031)
Fixed Monthly Service	\$0.8746	\$(0.0388)	\$(0.0383)
Wastewater Overstrength			
Surcharge	\$0.1113	\$(0,0048)	\$(0,0040)
a) BOD b) COD	\$0.1113	\$(0.0048) \$(0.0048)	\$(0.0049) \$(0.0049)

C	onsumption Charge (per m³)	2022 Special Rate Adjustment	2023 Special Rate Adjustment	2024 Special Rate Adjustment
c)	oil and grease	\$0.0973	\$(0.0042)	\$(0.0043)
d)	phosphorous	\$0.9257	\$(0.0401)	\$(0.0407)
e)	suspended solids	\$0.1010	\$(0.0044)	\$(0.0044)
f)	total kjeldahl	\$0.2363	\$(0.0102)	\$(0.0104)
W	astewater Additional			
O	verstrength Surcharge			
a)	BOD	\$0.1113	\$(0.0048)	\$(0.0049)
b)	COD	\$0.1113	\$(0.0048)	\$(0.0049)
c)	oil and grease	\$0.0973	\$(0.0042)	\$(0.0043)
d)	phosphorous	\$0.9257	\$(0.0401)	\$(0.0407)
e)	suspended solids	\$0.1010	\$(0.0044)	\$(0.0044)
f)	total kjeldahl	\$0.2363	\$(0.0102)	\$(0.0104)

The Special Rate Adjustments for re-basing Wastewater Treatment rates and Charges for 2022 have been included in Wastewater Treatment Rates in Schedule 1, Part III.

2.3.3 Special Rate Adjustments for the 90-day Deferral Program

In 2022 (affecting rates payable for the period April 1, 2022 to March 31, 2023) Special Rate Adjustments for the 90-Day Deferral Program will be applied to the Stormwater Utility Rate, the Sanitary Utility Flat Monthly Charge and the Wastewater Fixed Monthly Charge set out in Schedule 1, Parts I and III. These Special Rate Adjustments for the 90-Day Deferral Program are required to recover the \$1.6 million for the incremental bad debt expense, administration, and carrying costs associated with the 90-Day Deferral Program.

The Special Rate Adjustments for the 90-Day Deferral Program for 2022 have been included in the Sanitary and Stormwater Rates in Schedule 1, Part I and in Wastewater Treatment Rates in Schedule 1, Part III. These Special Rate Adjustment will be removed from Customer bills in 2023.

The Special Rate Adjustment for the 90-Day Deferral Program applied to the Fixed Monthly Charge for Wastewater for 2022 and 2023 is as follows:

Fixed Monthly Service Charge - Wastewater	2022 Special Rate Adjustment	2023 Special Rate Adjustment*
	\$0.1547	\$ λ

The Special Rate Adjustment for the 90-Day Deferral Program applied to the Stormwater Utility Rate for 2022 and 2023 is as follows:

Stormwater Utility	2022 Special Rate	2023 Special Rate
Rate	Adjustment	Adjustment*
	\$0.000358	\$ λ

^{*} The 2023 Special Rate Adjustment for the 90-day Deferral Program will be determined following a true up of the 2022 Special Rate Adjustment based on actual costs incurred as a result of the 90-day Deferral Program. The 2023 Special Rate Adjustment for the 90-day Deferral Program will constitute a negative rate adjustment to remove the 2022 Special Rate Adjustment from rates for remainder of the PBR term following March 31, 2023.

The Special Rate Adjustment for the 90-Day Deferral Program applied to the Sanitary Utility Flat Monthly Service Charge for 2022 and 2023 is as follows:

Sanitary Utility Flat Monthly Service Charge (based on meter size)	2022 Special Rate Adjustment	2023 Special Rate Adjustment*
16mm	\$0.23	\$ λ
20mm	\$0.41	\$ λ
25mm	\$0.64	\$ λ
40mm	\$1.23	\$ λ
50mm	\$1.68	\$ λ
75mm	\$3.47	\$ λ
100mm	\$6.47	\$ λ
150mm	\$12.23	\$ λ
200mm	\$19.52	\$ λ
250mm	\$48.44	\$ λ
300mm	\$48.44	\$ λ
400mm	\$53.01	\$ λ
500mm	\$57.05	\$ λ

^{*} The 2023 and 2024 Special Rate Adjustment for the 90-day Deferral Program will be determined following a true up of the 2022 Special Rate Adjustment based on actual costs incurred as a result of the 90-day Deferral Program. The 2023 and 2024 Special Rate Adjustment for the 90-day Deferral Program will constitute a negative rate adjustment to remove the 2022 Special Rate Adjustment from rates for remainder of the PBR term following March 31, 2023.

2.3.4 Special Rate Adjustment for Corrosion and Odour Reduction Strategy (CORe)

In each of the years 2023, 2024 and 2025 a Special Rate Adjustment to recover the costs of the CORe program will be added to sanitary variable rate in Schedule 1, Part I – Sanitary and Stormwater Rates. This Special Rate Adjustment for the CORe Program is required to recover the costs of a program to prevent the formation of hydrogen sulfide gas which will reduce odour impacts and lengthen the life of the sewer network through corrosion mitigation.

The Special Rate Adjustment has been included in the Sanitary and Stormwater Rates, Schedule 1, Part I for 2022. The Special Rate Adjustment for the CORe program applied to the Sanitary Utility Rate for 2022, 2023 and 2024 is as follows:

Sanitary Utility Rate	2022 Special Rate Adjustment	2023 Special Rate Adjustment	2024 Special Rate Adjustment
All Premises (except large wholesale)	\$0.21003	\$(0.03040)	\$0.09199
Large Wholesale with Collection System	\$0.11762	\$(0.01702)	\$0.05151

2.3.5 Special Rate Adjustment for Stormwater Integrated Resource Plan (SIRP)

In each of the years 2022, 2023 and 2024 a Special Rate Adjustment to recover the costs of the SIRP will be added to Stormwater rate in Schedule 1, Part I – Sanitary and Stormwater Rates. This Special Rate Adjustment for the SIRP is required to recover the costs of a flood mitigation program.

The Special Rate Adjustment has been included in the Sanitary and Stormwater Rates, Schedule 1, Part I for 2022. The Special Rate Adjustment for the SIRP, applied to the Stormwater Utility Rate for 2022, 2023 and 2024, is as follows:

Stormwater Utility	2022 Special Rate	2023 Special Rate	2024 Special Rate
Rate	Adjustment	Adjustment	Adjustment
	\$0.008726	\$0.003965	

2.4 Non-routine Adjustments

Commencing January 1st, 2023 and for each subsequent year on that date the flat charge for Sanitary or Stormwater utility service and/or the fixed charge for Wastewater Treatment service may be adjusted in accordance with the non-routine adjustment clause, Article 5.0 herein, as applicable.

2.5 Sanitary Sewer Trunk Charge

Commencing January 1, 2023 and for each subsequent year on that date the Sanitary Sewer Trunk Charge shall be adjusted in accordance with an adjustment notice provided by the City of Edmonton, as applicable. If applicable, the City of Edmonton will provide an adjustment notice on or before November 15 of the calendar year immediately preceding the year in relation to which the adjustment to the Sanitary Sewer Trunk Charge will be made.

3.0 Drainage Services Quality

Drainage Services Quality is measured by the results of four indices described in Sections 3.1 - 3.4.

These are:

- Environment Index
- Customer Service Index
- System Reliability and Optimization Index
- Safety Index

Performance under each index is measured independently on a point basis with 100 base points available if the standards in all four areas are achieved. In total, up to 10 additional bonus points for performance above the standard are available. These bonus points are described within each index.

If Drainage Services does not meet the standard, financial penalties are applied to a maximum of \$1,000,000 per annum. If a penalty amount is assessed, that amount is returned to the customers in the form of a rate rebate. The proposed weighting and penalty amounts applicable to each performance category for Drainage Services are detailed in the table below.

Drainage Services Performance Measures Indices and Penalties

	Performance Category	A Weighting	B Maximum Penalty
1	Environmental Index	35%	\$350,000
2	Customer Services Index	20%	\$200,000
3	System Reliability/Optimization Index	30%	\$300,000
4	Safety Index	15%	\$150,000
	Total	100%	\$1,000,000

For each full point scored below 100 base and bonus points, a penalty of \$67,000 will be assessed to a maximum of \$1,000,000. There is no reward for performance above 100 base and bonus points. For purposes of these calculations, point amounts will be rounded to the nearest tenth of a point and calculated on a calendar year basis.

EPCOR has an obligation to maintain all documentation related to the tracking and scoring of each index and be prepared to present it on request during an audit, in order to satisfy the requirements of Bylaw 19627. The final score for each index and the individual performance measures that comprise each index will be published annually on the EPCOR Drainage Services Inc. external website. The audited performance measure results will also be provided to the City of Edmonton as part of the approval process for new rate increases.

Chart 1	l.0 –	Environn	nent l	Index -
CHUIL				

Standard

1.1	Stormwater Flow Monitoring	Storm Drainage Area Monitored	63.0%
1.2	Environmental Incidents	Environmental Incidents	50
1.3	Green Hectares	Area with Runoff Managed by Green Infrastructure	Annual 2022 – 45 2023 – 90 2024 – 180

Chart 2.0 – Customer Service

Standard

2.1	Service Maintenance Calls	Service Maintenance Calls resolved within 24 hours	80.0%
2.2	Emergency Dig Ups - Service Restored	Emergency Dig Up Services Restored within 48 hours from Time Received from Operations	98.0%
2.3	Service Connections - Average Time	Service Connections - meeting 6 week target	85.0%
2.4	Sewer Odour Hotspots	City Wide Coverage Area of Sewer Odour Hotspots	2022 - 15% 2023 - 14.5% 2024 - 14%

Chart 3.0 - System Reliability and Optimization Index

Standard

3.1	Blocked Sewers	Blocked Sewers per 100 Kms	2.10
3.2	Sewer Renewal	Sewers Renewed, km	60.0
3.3	Infrastructure Condition Rating - Minimum Level	Infrastructure at or above Minimum Level of Condition Rating,	90.0%
3.4	Full Property Flood Proofing Inspections	Number of Inspections Completed	750

Chart 4.0 - Safety Index

Standard

4.1	Near Misses	Near Misses	750
4.2	Worksite Inspections and Observations	Worksite Inspections and Observations	1300
4.3	LTIF	LTIF	0.75
4.4	AIF	AIF	4.0

Drainage Services Bylaw No. 19627

3.1 Environmental Index

Description The environmental index measures the success of Drainage Services

programs and policies designed to mitigate and report adverse environmental impacts. The index is a measure calculated on the basis of

three equally weighed components.

Formula The maximum base value of the environmental index is 35.0 base points

as calculated under the following formula:

Environmental Index =
$$35.0 \text{ x}$$
 SWFM + EIF +GH

Where,

SWFM means the storm water flow monitoring factor,

EIF means the environment incident factor; and

GH means the green hectares factor.

35.0 = points available for this index

A maximum of 3.5 bonus points is available for the environmental index based on the formula.

The maximum total environmental index points is 38.5.

3.1.6 Storm Water Flow Monitoring Factor

Description The Storm Water Flow Monitoring factor is a measure of the percentage

of storm drainage area being monitored relative to all qualified

hydrologically-effective drainage areas serviced by outfalls.

Formula The Storm Water Flow Monitoring factor (SWFM) is measured by the

formula:

Storm Water Flow Monitoring Factor = $\frac{\text{SDAM}}{63.0\%}$

Where,

SDAM means percentage of storm drainage area being monitored; and

63.0% is the Storm Water Flow Monitoring standard.

Benchmark ≥63.0%

Definitions The percentage of storm drainage area being monitored (SDAM) is

calculated as follows:

% of storm drainage area being monitored =100 x

Monitored Area (hectares)

Qualifying Area (hectares)

Monitored Area - means the sum of effective drainage areas serviced by permanent outfall monitoring stations.

Qualifying Area - means the sum of hydrologically-effective drainage areas serviced by outfalls as per Drainage Design Standards section 18.13.5.

This applies to storm outfall sizes as specified in the design guidelines as follows:

- Equal to or greater than 1200 mm to the North Saskatchewan River; or
- Equal to or greater than 900 mm to Whitemud, Blackmud, or Mill creeks; or
- Equal to or greater than 500 mm to other creeks; or
- Equivalent capacities for multiple outfalls for the development area; or
- Upstream of the E.L. Smith Water Treatment Plant.

Reporting Frequency Annually

3.1.7 Environment Incident Management

Description The Environment Incident Management factor measures the number of

incidents that are reportable to the municipal, provincial or federal

regulator.

Formula The environment incident factor (EIF) is measured by the formula:

Environment Incident Factor = $\frac{50}{EIR}$

Where,

EIR means the actual number of environmental incidents that are

reportable; and

is the environmental incident standard

Benchmark ≤ 50

Definitions Reportable Incident – one that involves contravention of a municipal,

provincial or federal regulation or bylaw, or a spill or release to the environment that is reportable as defined in provincial or federal release

reporting criteria.

3.1.8 Green Hectares

Description The Green Hectares factor measures the area when the volume of green

infrastructure managed runoff is spread evenly to a 15 mm depth.

Formula The green hectares factor (GH) is measured by the formula:

Green Hectares (GH) = GHMR
Annual Standard

Where,

GHMR means the area (hectares) when run-off (m3) managed by green

infrastructure is spread evenly to a 15 mm depth; and

is the GHMR annual standard for 2022

is the GHMR annual standard for 2023

is the GHMR annual standard for 2024

Benchmark >= 45 for 2022, > 90 for 2023 and >180 for 2024

Definitions A greened hectare represents a volume of runoff managed by a green

infrastructure (GI) or low impact development (LID) practice.

GI/LID programs may include storm water storage, bio retention, soils

cells, and pocket / small storage.

One greened hectare is equivalent to 15mm of managed stormwater from

one hectare of developed drainage area of 150m3 of managed stormwater.

Reporting Frequency Quarterly

3.2 Customer Service Index

Description The customer service index measures the success of Drainage Services

programs and policies pertaining to customer service. The index is a

measure calculated on the basis of four equally weighed components.

Formula The maximum base value of the customer service index is 20.0 base points

as calculated under the following formula:

Customer Service Index = 20.0 x $\frac{\text{SMC} + \text{EDU} + \text{SC} + \text{SOH}}{4}$

Where,

SMC means service maintenance calls factor,

EDU means emergency dig-ups with service restored factor;

SC means service connections factor; and,

SOH means sewer odour hotspots factor.

20 = points available for this index

A maximum of 2.0 bonus points is available for the environmental index based on the formula.

The maximum total environmental index points is 22.0.

3.2.9 Service Maintenance Calls

Description The service maintenance calls factor is a measure of the percentage of

service maintenance sewer trouble calls resolved within 24 hours.

Formula The service maintenance calls factor (SMC) is measured by the formula:

Service Maintenance Calls Factor = $\frac{SMCR}{80.0\%}$

Where,

SMCR means percentage of service maintenance sewer trouble calls

resolved within 24 hours; and

80.0% is the service maintenance calls factor standard.

Benchmark ≥80.0%

Definitions The percentage of service maintenance sewer trouble calls resolved within

24 hours (SMCR) is calculated as follows:

Total # of Sewer Trouble Work Orders Closed SMCR = 100 within 24 Hours

Total Number of Sewer Trouble Work Orders

The start and completion time for each sewer trouble work order is

determined as follows:

Start Time means the time when a 311 call request is received,

recorded in IVARA and a sewer trouble work order is

started

Completion Time means the time when a crew deactivates a work order

in IVARA after resolving the sewer trouble.

3.2.10 Emergency Dig-Ups with Service Restored

Description The emergency dig-ups with service restored factor is a measure of the

> percentage of emergency dig ups restored within 48 hours from the time the call is referred from Drainage Operations to Drainage Construction as

an emergency dig-up.

The emergency dig-ups with service restored (EDU) factor is measured by **Formula**

the formula:

EDUR Emergency Dig-Ups with Service Restored Factor = 98.0%

Where,

EDUR means the percentage of emergency dig ups restored within 48

hours: and

98.0% is the emergency dig-ups with service restored standard.

Benchmark ≥98.0%

Definitions The percentage of emergency dig-ups restored within 48 hour(s) is

calculated as follows:

Number of services restored within 48 hours EDUR = 100 xTotal number of emergency dig-up responses

Where,

Date and time received means the date and time when Drainage Operations informs Drainage Construction of an emergency dig-up.

Date and time restored means the date and time that service is restored to the customer. Note: there may still be additional repairs and / or restoration work needed to complete the work that do not impact

restoration of service.

3.2.11 Service Connections

Description The service connections factor is a measure of the success in completing

the installation of new sanitary, storm, and common trench water service

connection (≤50 mm) projects within a predetermined time frame.

Formula The service connections factor is measured by the formula:

Service Connections Factor (SC) =

Where,

SC6 means the percentage of installations of new sanitary, storm,

and common trench water service connection (≤50 mm)

projects completed within 6 weeks; and

85.0% is the service connections standard

Benchmark >85.0%

Definitions The service connections average time is measured by the formula:

> Start Date – End Date Service Connections Average Time =

Where,

Start Date means the construction ready date; and

End Date means the construction completion date

The percentage of service connections completed within 6 weeks (SC6) is

measured by the formula:

Service Connections Completed Within Service Connections Within 6 Weeks = 100 x6 Weeks

Total Service Connections Completed

3.2.12 Sewer Odour Hotspots

Description The sewer odour hotspots factor is a measure of the percentage of sewer

odour hotspots relative to city wide coverage area.

Formula The sewer odour hotspots (SOH) factor is measured by the formula:

Sewer Odour Hotspots Factor = Annual Standard
SOHP

Where,

SOHP means the percentage in city wide coverage area of sewer

odour hotspots; and

is the sewer odour hotspot annual standard for 2022

is the sewer odour hotspot annual standard for 2023

is the sewer odour hotspot annual standard for 2024

Benchmark $\leq 15.0\%$ for 2022, $\leq 14.5\%$ for 2023 and $\leq 14.0\%$ for 2024

Definitions The percentage in city wide coverage area of sewer odour hotspots is

calculated using the following formula:

SOHP = 100 x

Area of sewer odour hotspots

Total municipality area

Where,

Area of sewer odour hotspots means the region where the odour report spatial density exceeds a defined threshold of 10 reports per square

kilometer; and

Total municipality area means Municipal franchise area and will be fixed

at the starting period of the performance metric.

Reporting Frequency Annually

3.3 System Reliability and Optimization Index

Description The system reliability and optimization index is a measure of the

performance of Drainage Services. It is calculated on the basis of four

equally weighed components.

Formula The maximum base value of the system reliability and optimization index

is 35.0 base points as calculated under the following formula:

System Reliability Index =
$$30.0 \text{ x}$$
 BSF + SR + ICRML + FPFPI

Where,

BSF means the blocked sewer factor,

SR means sewer renewal factor;

ICRML means the infrastructure condition rating minimum level

factor; and

FPFPI means the full property flood proofing inspections factor.

is the points available for this index.

A maximum of 3 bonus points is available for the system reliability and optimization index based on the formula.

The maximum total system reliability and optimization index points is 33.

3.3.13 Blocked Sewers Factor

Description The Blocked Sewers Factor is a measure of the effectiveness of the

Drainage Services Preventive Maintenance program which involves

proactive cleaning and inspection of wastewater sewer mains.

Formula The blocked sewers factor (BSF) is measured by the formula:

Blocked Sewers Factor = 2.10
BSR

Where,

BSR means the number of blocked sewers per one hundred (100)

kilometers of sanitary and combined sewer pipe; and

2.10 is the blocked sewers factor standard.

Benchmark ≤ 2.10

DefinitionsBlocked Sewer – blocked sewer mains that caused sanitary and combined sewer systems to back up and which required the deployment of equipment

and labour to clear - regardless of the cause (e.g. roots, greases, debris, poor hydraulics or structure). A blocked sewer main may result in sewage

back up, sewer service interruption or overflow.

Sanitary Sewer – sewer mains that carry sanitary sewage.

Combined Sewer – sewer mains that carry both sanitary and storm sewage

combined.

Storm Sewer – sewer mains that carry storm water flow. Storm water

sewer mains are not included in this factor.

3.3.14 Sewer Renewal Factor

Description

The Sewer Renewal Factor is a measure of the sewers renewed / relined as part of the Neighbourhood Renewal Program, Local Sewer Rehabilitation Program, Arterial and Collector Roadway Renewal Coordination Program, SIRP Proactive Pipe Relining Program, Proactive Service Renewal Program and CORe Large Trunk Rehabilitation Program.

Formula

The Sewer Renewal Factor (SR) is measured by the formula:

Sewer Renewal Factor =
$$\frac{SRR}{60.0}$$

Where,

SRR

means the km of sewers renewed / relined as part of the Neighbourhood Renewal Program, Local Sewer Rehabilitation Projects and Arterial and Collector Renewal Coordination Projects, SIRP Proactive Pipe Relining Program, Proactive Service Renewal Program and CORe Large Trunk Rehabilitation Program.

60.0 is the Sewer Renewal standard.

Benchmark

 \geq 60.0 km

Definitions

Drainage Neighbourhood Renewal Program – means renewal and/or rehabilitation of Drainage Infrastructure comprised of:

- main sewers:
- Catch Basin leads and Service Laterals, and
- Catch Basin and Manhole repairs

and is based on a coordination schedule with Transportation or the condition assessment risk ranking priority established by Drainage.

Local Sewer Rehabilitation program — means rehabilitation of nonemergency main sewers identified by Drainage Operations routing inspection or through customer complaints.

Arterial and Collector Roadway Renewal Coordination program - means rehabilitation of sewers, Catch Basin leads, Catch Basins and Manholes

following the Transportation Arterial & Collector Rehab /Reconstruction program schedules

SIRP Proactive Pipe Relining program - means relining of sanitary and combined pipes in surface ponding areas intended to reduce the risk of basement flooding due to inflow and infiltration.

Proactive Service Renewal program – means renewal of services that have structural and/or maintenance issues but are not in adequate condition for relining.

CORe Large Trunk Rehabilitation program – means renewal of major trunks

3.3.15 Infrastructure Condition Rating Factor

Description The Infrastructure Condition Rating Factor is a measure of the percentage

of infrastructure at or above a minimum level of condition rating.

Formula The Infrastructure Condition Rating Factor is measured by the formula:

Infrastructure Condition Rating Factor = $\frac{ICR}{90.0\%}$

Where,

ICR means the percentage of infrastructure assets with a physical

condition rating of Very Good, Good or Fair Condition; and

90.0% is the infrastructure minimum level of condition standard.

Benchmark $\geq 90.0\%$

Definitions Infrastructure Condition Rating (ICR) – refers to the percentage of

infrastructure assets with a physical condition rating of Very Good, Good

or Fair Condition.

Infrastructure Condition Rating is calculated using the following formula:

Total replacement value (\$) of physical condition rated assets

ICR = 100 x with a Fair or better condition rating

Total replacement value (\$) of physical condition rated assets with all ratings

Total replacement value (\$) of physical condition rated assets with a Fair or better condition rating means those assets with a physical condition rating of Very Good, Good or Fair.

Total replacement value (\$) of physical condition rated assets with all ratings means those assets with a physical condition rating of Very Good, Good, Fair, Poor or Very Poor.

Reporting Frequency Annually

3.3.16 Full Property Flood Proofing Inspections

Description The Full Property Flood Proofing Inspection factor measures the number

of full flood proofing inspections completed and that include an inspection

report provided to the property owner.

Formula The full property flood proofing inspection factor (FPFPI) is measured by

the formula:

Full Property Flood Proofing Inspection FPFI
(FPFPI) = 750

Where,

FPFI means the actual number of full property flood proofing

inspections completed that include an inspection report

provided to the property owner; and

is the full property flood proofing inspection standard

Benchmark ≥ 750

Definitions Full Property Flood Proofing Inspection – a full flood proofing inspection

of a property that results in the development of a property flood proofing

report that includes recommended improvements.

3.4 Safety Index

Description

The safety index is a measure of the success of programs and the application of policies that maximizes the safety of employees and the public. It is calculated on the basis of four equally weighed components. The combined results of the four components produce the measure of the safety index.

Formula

The maximum base value of the safety index is 15.0 base points and is calculated under the following formula:

Safety Index =
$$15.0$$

$$\frac{NMF + WIOF + LTF + AIF}{4}$$

Where,

NMF means the near miss reporting factor,

WIOF means the worksite inspection and observation factor,

LTF means the lost time frequency factor; and

AIF means the all injury frequency factor.

15.0 = points available for this index

A maximum of 1.5 bonus points is available for the safety index based on the formula.

The maximum total safety index points is 16.5.

3.4.17 Near Miss Reporting Factor

Description The Near Miss Reporting Factor is a measure of the number of Near Miss

and Hazard Identification reports completed each year.

Formula The near miss reporting factor (NMF) is measured by the formula:

Near Miss Reporting Factor = $\frac{NM + HI}{750}$

Where,

NM means the number of near miss reports entered in the ERS

system;

HI means the number of hazard identification reports entered in

the ERS system; and

is the near miss reporting standard.

Benchmark ≥750

Definitions Near Miss: An unplanned event, unsafe condition or unsafe action that did

not result in contact, injury, illness, or damage - but had the potential to do

SO.

Hazard Identification: An observed potential hazard that did not result

in a near miss or incident on EPCOR property.

3.4.18 Work Site Inspections and Observations Factor

Description The Work Site Inspections and Observations Factor measures the number

of work site inspections and observations completed each year.

Formula The worksite inspections and observations factor (WIOF) is measured by

the formula:

Worksite Inspections and Observations Factor= $\frac{\text{WIO}}{1300}$

Where,

WIO means the actual number of worksite inspections / observations

completed per year; and

is the worksite inspection standard.

Benchmark ≥1300

DefinitionsInspection procedures are as defined by Work Site Inspection Reports and

Office Work Site Inspection Reports

Observation procedures are as defined by the Safety Track observations

process.

3.4.19 Lost Time Frequency Factor

Description The Lost Time Frequency Factor measures the effectiveness of a safety

program as related to disability injuries and illnesses

Formula The lost time frequency factor (LTFF) is measured by the formula:

Lost Time Frequency Factor = $\frac{0.75}{\text{LTFR}}$

Where,

LTFR means the actual lost time frequency rate; and

is the lost time frequency standard.

Benchmark ≤ 0.75

Definitions Lost Time Incident – A work related disability injury or disability illness

that results in an employee missing time at work

Exposure Hours - The total number of hours employees were exposed to

the work site

Lost Time Frequency Rate is calculated using the following formula

defined in the Canadian Electrical Association Work Injury / Illness

Standards:

(# Disability Injuries + # Disability Illnesses) x 200,000

Exposure Hours

Where 200,000 represents 100 full time employees who work

40 hours per week for 50 weeks

3.4.20 All Injury Frequency Rate Factor

Description The All Injury Frequency Rate Factor measures the effectiveness of a

safety program as related to disability injuries and medical aid injuries

Formula The all injury frequency factor (AIFF) is measured by the formula:

All Injury Frequency Factor = $\frac{4.0}{\text{AIFR}}$

Where.

AIFR means the actual all injury frequency rate; and

4.0 is the all injury frequency rate standard.

Benchmark <4.0

Definitions Lost Time Incident – A work related injury or illness that results in an

employee missing time at work

Medical Aid Injury (MA) - An injury that requires assessment and care by

a physician

Exposure Hours - The total number of hours employees were exposed to

the work site

All Injury Frequency - This is based on the total number of Fatalities and Lost-Time Injuries, plus the total number of Medical Treatment Injuries

which occurred in the calendar year. The following formula shall be used:

(# Fatalities + # Lost-Time Incidents + # Medical Aid Injuries) x 200,000

Exposure Hours

Where 200,000 represents 100 full time employees who work 40 hours per

week for 50 weeks.

4.0 Wastewater Treatment Service Quality

Wastewater Treatment System Service Quality is measured by the results of four indices described in Sections 4.1- 4.4.

Performance under each index is measured independently on a point basis with 100 base points available if the standards in all four areas are achieved. In total, up to 10% additional bonus points for performance above the standard are available. These bonus points are described below within each index.

If Wastewater Treatment Services does not meet the standard, financial penalties are applied to a maximum of \$1,000,000 per annum. If a penalty amount is assessed, that amount is returned to the customers in the form of a rate rebate. The proposed weighting and penalty amounts applicable to each performance category for Wastewater Treatment Services are detailed in the table below.

Wastewater Treatment Services Performance Measures Indices and Penalties

	Performance Category	A Weighting	B Maximum Penalty
1	Water Quality & Environmental Index	45%	\$180,000
2	Customer Services Index	15%	\$60,000
3	System Reliability/Optimization Index	25%	\$100,000
4	Safety Index	15%	\$60,000
	Total	100%	\$400,000

For each full point scored below 100 base and bonus points, a penalty of \$27,000 will be assessed to a maximum of \$400,000. There is no reward for performance above 100 base and bonus points. For purposes of these calculations, point amounts will be rounded to the nearest tenth of a point and calculated on a calendar year basis.

Chart 1.0 – Water Quality and Environmental Index

Star	ոհո	rd
Stal	lua	ru

1.1	WELPI Factor	Percentage below limits	26.0%
1.2	Environmental Incident Factor	Number of incidents	5

Chart 2.0 – Customer Service Index

Standard

2.1	H ₂ S – 1 Hour Exceedances Factor	Number of exceedances	4
2.2	H ₂ S – 24 Hour Exceedances Factor	Number of exceedances	1
2.3	Scrubber Uptime Percentage Factor	Percentage uptime	96.0%

Chart 3.0 - System Reliability and Optimization Index

Standard

3.1	Enhanced Primary Treatment Factor	Percentage in use	94%
3.2	Bio-solids Inventory Reduction	Relative Reduction	1.05
3.3	Energy Efficiency Factor	kWh/ML of effluent	508

Chart 4.0 - Safety Index

Standard

4.1	Near Miss Reporting Factor	Number of Reports	220
4.2	Worksite Inspections and Observations	Number completed	919
4.3	Lost Time Frequency Factor	Frequency / Exposure	0.75
4.4	All Injury Frequency Factor	Frequency / Exposure	1.0

4.5 Water Quality and Environmental Index

Description

The water quality and environmental index measures the success of operational processes and procedures designed to manage the quality of effluent returned back the North Saskatchewan River and to manage adverse environmental impacts. The index is a measure calculated on the basis of two equally weighed components.

Formula

The maximum base value of the water quality and environmental index is 45 base points as calculated under the following formula:

Water Quality and Environmental Index = 45 x WQF + I

2

Drainage Services Bylaw No. 19627

Page 35 of 51

Where,

WQF means the water quality factor,

EIF means the environmental incident factor, and

is the points available for this index.

A maximum of 4.5 bonus points is available for the water quality and environmental index.

The maximum total points for the water quality and environmental index is 49.5.

4.5.21 Water Quality Index

Description

The *Water Quality Index* is determined by the Wastewater Effluent Limit Performance (WELP) measure which is a measure of the performance of the Wastewater Treatment process at the Gold Bar Wastewater Treatment Plant.

Formula

The water quality index (WQI) is measured by the formula:

Water Quality Index -	26.0
Water Quality Index = -	WELP

Where,

WELP means the value of the Wastewater Effluent Limit Performance, which measures the percentage of the discharge limit for five parameters in the Gold Bar wastewater treatment plant's final effluent; and

26.0 is the water quality standard.

Benchmark <= 26.0 YTD

Definitions WELP = Wastewater Effluent Limit Performance

Reporting Frequency Monthly

4.5.22 Environmental Incident Factor

Description The Environmental Incident Factor the number of incidents that are

reportable to the municipal, provincial or federal regulator and that are

considered preventable.

Formula The environmental incident factor (EIF) is measured by the formula:

Where,

EIRP means the actual number of environmental incidents that are

both reportable and preventable; and

5 is the environmental incident standard.

Benchmark <= 5 YTD

DefinitionsReportable Incident – one that involves contravention of a municipal, provincial or federal regulation or bylaw, or a spill or release to the environment that is reportable as defined in provincial or federal release reporting criteria.

Preventable Incident – one that meets the following criteria:

- An investigation of the incident demonstrates a failure to follow regulatory requirements or a documented EPCOR procedure, or
- An incident that is a recurrence of a similar reportable incident due to failure to implement corrective action that had been previously identified, or
- There is an administrative contravention including failure to notify or report to the regulator in a timely manner. Or to sample and test as required under the Approval to Operate issued by Alberta Environment and Water

A reportable and preventable incident is one that is both reportable and preventable according to the above criteria. It is a government reportable incident that could have been prevented if reasonable diligence was exercised by EPCOR

If it can be demonstrated that EPCOR took all reasonable measures to prevent the incident from occurring, the incident will not be considered preventable. Mitigating circumstances and external factors (i.e. unpredictable equipment failure, unusual weather conditions, the actions of external parties that are not controllable by EPCOR will be considered in determining if the incident was preventable.

Reporting Frequency Monthly

4.6 Customer Service Index

Description The customer service index is the measure of three equally weighed

components. The combined results of the three components produce the

measure of the customer service index.

Formula The maximum base value of 15 base points as calculated under the following

formula:

Customer Service Index = 15 x HS01F + HS24F + SUF

Where,

HS01F means H2S 1-hour exceedance factor,

HS24F means H2S 24-hour exceedance factor; and

SUF means scrubber uptime factor.

is the points available for this index.

A maximum of 1.5 bonus points is available for the customer service index.

The maximum total customer services index points is 16.5.

4.6.23 H₂S – 1-Hour Exceedance Factor

Description The H2S-1-Hour Exceedance Factor is a measure of the performance of

the odour control systems at the Gold Bar Wastewater Treatment Plant.

Formula The H2S 1-hour exceedance factor (HS01F) is measured by the formula:

H2S 1-Hour Exceedance Factor =
$$\frac{4}{(GB1 + BEV1)/2}$$

Where,

GB1 means the number of exceedances of the 1-hour limit

registered at the Gold Bar air quality monitoring station,

BEV1 means the number of exceedances of the 1-hour limit

registered at the Beverly air quality monitoring station; and

4 the H2S 1-hour exceedance standard.

Benchmark <= 4 YTD

Definitions na

Reporting Frequency Monthly

4.6.24 H₂S – 24 Hour Exceedance Factor

Description The H2S - 24-Hour Exceedance Factor is a measure of the performance of

the odour control systems at the Gold Bar Wastewater Treatment Plant.

Formula The H2S 24-hour exceedance factor (HS24F) is measured by the formula:

H2S 24-Hour Exceedance Factor =
$$\frac{1}{(GB24 + BEV24)/2}$$

Where,

GB24 means the number of exceedances of the 24-hour limit

registered at the Gold Bar air quality monitoring station,

BEV24 means the number of exceedances of the 24-hour limit

registered at the Beverly air quality monitoring station; and

1 the H2S 24-hour exceedance standard.

Benchmark <= 1 YTD

Definitions na

Reporting Frequency Monthly

4.6.25 Scrubber Uptime Factor

Description The Scrubber Uptime Factor is a measure of the performance of the odour

control systems at the Gold Bar Wastewater Treatment Plant.

Formula The scrubber uptime factor (SUF) is measured by the formula:

Scrubber Uptime Factor = $\frac{SUP1+SUP2+SUP3+SUP4) / TTL}{96\%}$

SUP	refers to a scrubber system's uptime or operating time as
	evidenced by the following component systems operating: a
	blower introducing foul air to a scrubber, chemical feed

blower introducing foul air to a scrubber, chemical feed systems (2 systems), and a scrubber recirculation system

SUP1 is the East Scrubber uptime in hours

SUP2 is the West Scrubber uptime in hours

SUP3 is the Fermenter Scrubber uptime in hours

SUP4 is the EPT Scrubber uptime in hours

TTL is the total hours in a year (for all four scrubbers combined)

when scrubbers would be expected to be operating, i.e. foul air is present in the operating areas relevant to a scrubber

is the Scrubber Uptime standard

Benchmark <= 96% YTD

Where,

Definitions na

Reporting Frequency Monthly

4.7 System Reliability and Optimization Index

Description The system reliability and optimization index is a measure of the

performance of the Gold Bar Wastewater Treatment Plant. It is calculated on

the basis of three equally weighed components..

Formula The maximum base value of the system reliability and optimization index is

25 base points as calculated under the following formula:

System Reliability Index =
$$25 \text{ x}$$
 $\frac{\text{EPTF} + \text{BSIRF} + \text{EEF}}{3}$

Where,

EPTF means the enhanced primary treatment factor,

BSIRF means bio-solids inventory reduction factor; and

EEF means the energy efficiency factor.

is the points available for this index.

A maximum of 2.5 bonus points is available for the system reliability and optimization index based on the formula.

The maximum total system reliability and optimization index points is 27.5.

4.7.26 Enhanced Primary Treatment Factor

Description The Enhanced Primary Treatment Factor is a measure of the performance of

the Enhanced Primary Treatment (EPT) process at the Gold Bar Wastewater

Treatment Plant.

Formula The enhanced primary treatment factor (EPTF) is measured by the formula:

Enhanced Primary Treatment Factor = EPT%
94.0%

Where.

EPT% means the percentage of time that the enhanced primary

treatment facility ran during wet weather events where the influent flow rate exceeds the EPT event threshold; and

94.0% is the enhanced primary treatment standard.

Benchmark >= 94.0% YTD

Definitions EPT Event – A continuous period of time (one or more hours) when total

effluent flows exceed the EPT Event Threshold.

EPT Event Threshold – Influent Flow Rate exceeds 420 ML/d

Reporting Frequency Monthly

4.7.27 Bio-solids Inventory Reduction Factor

Description The biosolids inventory reduction factor is a measure of the reduction in

biosolids inventory at the Clover Bar Biosolids Recycling Facility.

Formula The biosolids inventory reduction factor (BSIRF) is measured by the

formula:

Bio-solids Inventory Reduction Factor = $\frac{BSIR}{1.05}$

Where,

BSIR means the three year average (current year and the prior two

years) of the ratio of the total dry tonnes of biosolids removed

from the lagoons to the total dry tonnes of biosolids

deposited in the lagoons, and

is the biosolids reduction factor standard.

Benchmark < 1.05

Definitions The biosolids inventory reduction (BSIR) is calculated as follows:

Biosolids Inventory Reduction = $\frac{\text{Dry tonnes out}}{\text{Dry tonnes in}}$

Where.

Dry tonnes out - means, the dry tonnes of biosolids transferred from the biosolids storage lagoons at the Clover Bar Biosolids Recycling Facility to beneficial use programs (e.g. compost or land application).

Dry tonnes in - means the dry tonnes of biosolids contained in sludge transfers from the Gold Bar and Capital Regions wastewater treatment facilities to the biosolids storage lagoons at the Clover Bar Biosolids Recycling Facility.

Biosolids inventory – means the accumulated biosolids contained in the biosolids storage lagoons at the Clover Bar Biosolids Recycling Facility.

Reporting Frequency Monthly

4.7.28 Energy Efficiency Factor

Description The Energy Efficiency Factor is a measure of the energy consumed in the

treatment of wastewater at the Gold Bar Wastewater Treatment Plant.

Formula The energy efficiency factor (EEF) is measured by the formula:

Energy Efficiency Factor =
$$\frac{508}{\text{EN} / \text{ML}}$$

Where,

EN means energy used in all wastewater facilities in kWh,

ML means the total volume of wastewater effluent in millions of

litres that either receives ultraviolet (UV) treatment or is

membrane plant effluent; and

is the energy efficiency standard.

Benchmark >= 508 YTD

Definitions na

Reporting Frequency Monthly

4.8 Safety Index

Description The safety index is a measure of the success of programs and the application

of policies that maximizes the safety of employees and the public. It is calculated on the basis of four equally weighed components. The combined results of the four components produce the measure of the safety index.

Formula The maximum base value of the safety index is 15 base points is calculated

under the following formula:

Safety Index =
$$15 \text{ x}$$
 $\frac{\text{NMF} + \text{WIOF} + \text{LTF} + \text{AIF}}{4}$

Where,

NMF means the near miss reporting factor,

WIOF means the worksite inspections and observations factor,

LTF means the lost time frequency factor; and

AIF means the all injury frequency factor.

= points available for this index

A maximum of 1.5 bonus points is available for the safety index based on the formula.

The maximum total safety index points is 16.5.

4.8.29 Near Miss Reporting Factor

Description The Near Miss Reporting Factor is a measure of the number of Near Miss

reports completed each year.

Formula The near miss reporting factor (NMF) is measured by the formula:

Near Miss Reporting Factor = $\frac{NM + HI}{220}$

Where,

NM means the number of near miss reports entered in the ERS

system;

HI means the number of hazard identification reports entered in

the ERS system; and

is the near miss reporting standard.

Benchmark >= 220 YTD

Definitions *na*

Reporting Frequency Monthly

4.8.30 Worksite Inspections and Observations Factor

Description The Worksite Inspections and Observations Factor measures the number of

work site inspections and observations completed each year.

Formula The worksite inspections and observations factor (WIOF) is measured by the

formula:

Worksite Inspections and Observations Factor = $\frac{\text{WIO}}{919}$

Where,

WIO means the actual number of worksite inspections and

observations completed per year; and

is the worksite inspection standard.

Benchmark >= 919 YTD

Definitions Inspection procedures are as defined by Work Site Inspection Reports and

Office Work Site Inspection Reports

Observation procedures are as defined by the Safety Track observations

process.

Reporting Frequency Monthly

4.8.31 Lost Time Frequency Factor

Description The Lost Time Frequency Factor measures the effectiveness of a safety

program as related to disability injuries and illnesses

Formula The lost time frequency factor (LTFF) is measured by the formula:

Lost Time Frequency Factor = $\frac{0.75}{\text{LTFR}}$

Where,

LTFR means the actual lost time frequency rate; and

0.75 is the lost time frequency standard.

Benchmark $\leq 0.75 \text{ YTD}$

Definitions Lost Time Incident – A work related disability injury or disability illness that

results in an employee missing time at work

Exposure Hours - The total number of hours employees were exposed to the

work site

Lost Time Frequency Rate is calculated using the following formula defined in the Canadian Electrical Association Work Injury / Illness Standards:

Reporting Frequency Monthly

4.8.32 All Injury Frequency Factor

Description The All Injury Frequency Rate Factor measures the effectiveness of a safety

program as related to disability injuries and medical aid injuries

Formula The all injury frequency factor (AIFF) is measured by the formula:

All Injury Frequency Factor = $\frac{1.0}{AIF}$

Where,

AIF means the actual all injury frequency rate; and

is the all injury frequency rate standard.

Benchmark <= 1.0 YTD

Definitions Lost Time Incident – A work related injury or illness that results in an

employee missing time at work

Medical Aid Injury (MA) - An injury that requires assessment and care by

a physician

Exposure Hours - The total number of hours employees were exposed to

the work site

All Injury Frequency - This is based on the total number of Fatalities and Lost-Time Injuries, plus the total number of Medical Treatment Injuries which occurred in the calendar year. The following formula shall be used:

(# Fatalities + # Lost-Time Incidents + # Medical Aid Injuries) x 200,000

Exposure Hours

Where 200,000 represents 100 full time employees who work 40 hours per week for 50 weeks.

Reporting Frequency

Monthly

5.0 Non-Routine Adjustments

Non-routine adjustments are, by their nature unusual, significant in size or nature and beyond the scope of control of EWSI. Requests for non-routine adjustments will be considered for each of Stormwater, Sanitary Utility Services and Wastewater Treatment Services and can include either a positive or a negative adjustment.

Costs resulting in an annual adjustment to EWSI's total revenue requirement for the Sanitary and Stormwater Utilities of up to \$500,000 are not eligible for approval as a non-routine adjustment. Costs resulting in either an annual adjustment to EWSI's total revenue requirement for the Sanitary and Stormwater Utilities of less than \$3 million but either greater than \$500,000 or greater than \$1 million cumulatively are eligible for consideration and approval by the City Manager as a non-routine adjustment. Costs resulting in an annual adjustment to EWSI's total revenue requirement for the Sanitary and Stormwater Utilities equal to or greater than \$3 million are eligible for consideration and approval by City Council. Review of the non-routine adjustment application will consider the projected return on equity.

If EWSI anticipates making a request for one or more non-routine adjustments to take effect on January 1, 2023, January 1, 2024 or January 1, 2025 (the Rate Adjustment Year) EWSI will on or before September 1 of the calendar year immediately preceding the Rate Adjustment Year submit its request for non-routine adjustments to the City Manager, and will include with such request sufficient information to enable the City Manager / City Council to evaluate the request. If after receiving the submission, the City Manager / City Council is satisfied that the non-routine adjustments should be included in the Sanitary or Stormwater variable rate calculated in accordance with this bylaw, the City Manager will issue a confirmation letter on or before October 15 confirming that the non-routine adjustments will be included in the Sanitary and Stormwater rates to take effect on the January 1st next following.

All amounts approved as non-routine adjustments are approved and funded on an interim basis and shall be charged to EWSI's Adjustment Deferral Account (Drainage or Wastewater) as applicable. EWSI shall, within a reasonable time frame following completion of the project funded by the non-

routine adjustment, prepare a final true up of the non-routine adjustment funding based on actual costs. EWSI will determine a reasonable time frame over which to recover/credit the balance of the account. Carrying costs will be calculated on the Drainage Adjustment Deferral Account balance.

The rate impact of non-routine adjustments will be calculated and added to the flat or fixed charge for either Sanitary or Stormwater Utility Charges, as applicable.

5.1 Changes to Legislation, Regulation or Taxes

In the event there is a change to: legislation, regulation, bylaws, policy order or directive affecting EWSI's operations, including the common law and the law of equity; rates of tax or other mandatory amounts payable by EWSI to any level of government; the status of EWSI under existing legislation or the application of existing legislation to EWSI; then costs arising from any such event will be considered as non-routine.

5.2 Consequences of Force Majeure

Non-routine adjustments include any costs occasioned by Force Majeure events that are not recovered under a policy of insurance. For purposes of non-routine adjustments under this Schedule 3, events or circumstances of Force Majeure include: acts of God, strikes, lockouts or other industrial disturbances, acts of the Queen's enemies, wars, blockades, insurrections, riots, epidemics, landslides, lightning, floods, earthquakes, explosions, fires, civil disturbances, mechanical breakdowns, regulatory requirements or approval conditions or other acts or interventions of any kind by federal, provincial, state or local governments or any of their agencies or boards, the order or direction of any court, and any other causes whether of the kind herein enumerated or otherwise, not within the reasonable control of EWSI and which by the exercise of reasonable diligence and at a reasonable cost EWSI is unable to prevent or overcome.

5.3 Deterioration of Drainage or Wastewater Treatment Systems

If there is significant deterioration to the Drainage System or Wastewater Treatment facilities, beyond reasonable projections, remediation costs will be considered as non-routine. Without limiting the foregoing, these circumstances may include unanticipated asset failure or deterioration requiring immediate repair or remediation.

5.4 Customer – initiated or City – initiated System Expansion

Costs incurred to create significant Sewerage System or Wastewater Treatment facilities expansion as a result of increases to the size of EWSI's Customer base and/or increased demand by Customers or the City for Drainage or Wastewater Treatment Services, beyond reasonable projections, will be considered as non-routine.

5.5 City - initiated Relocations of Drainage Assets

Costs incurred to effect significant Sewerage System relocations, permanent or temporary moves or removals as a result of City requests will be considered as non-routine.

5.6 Franchise Agreement

If there is an amendment to the Drainage Services Franchise Agreement or the Wastewater Treatment Franchise Agreement affecting Stormwater or sanitary rates or wastewater treatment rates, the resultant impacts on the Stormwater, sanitary and or wastewater treatment rates will be deemed to be non-routine adjustments.

5.7 City Initiatives

Costs incurred to comply with City directed initiatives such as, and without limiting the foregoing, environmental initiatives or projects connected with accelerated flood mitigation will be deemed to be non-routine adjustments.

5.8 Flood Mitigation

Costs incurred to implement flood mitigation projects or initiatives will be considered as non-routine.

5.9 Grant Funding

Cost reductions to the approved revenue requirement resulting from the receipt or recognition of approved grants will be considered as a negative non-routine adjustment.

6.0 Off-Ramp

This performance-based drainage and wastewater treatment regulation can be terminated with the mutual consent and agreement of EWSI and the City.

In the event of termination of this Performance-Based Regulation Plan, the balance of the Adjustment Deferral Account must be cleared within a one-year period from the date of termination.

7.0 Reporting and Filing Requirements

On March 1st of the year following the reporting year (January 1 – December 31), EWSI will file with its regulator, the City, an *Annual Drainage and Wastewater Treatment Rate Filing*. The filing will contain five parts:

- An audit report as outlined in Schedule 4, if rates are adjusted pursuant to Article 4 herein;
- Rate Sheets The rates for each calendar year as outlined in Schedule 4; and
- Drainage Service Quality Results A report on EWSI's performance related to service quality metrics.
- Wastewater Treatment Service Quality Results the results of each of the components of the wastewater treatment service quality indices.
- Consumption Deferral Account Report

If rates are adjusted pursuant to Article 5.0, the non-routine adjustment clause, an accountant will review the *Annual Drainage and Wastewater Treatment Rate Filing*, conduct an audit and prepare an audit report in accordance with Canadian generally accepted auditing standards. The audit report will address whether the Stormwater, sanitary and the wastewater treatment rates are calculated and presented in accordance with the requirements of this bylaw. The audit reports will be prepared by EPCOR Utilities Inc.'s Internal Audit department.

The filing will be submitted to the City Manager. The City Manager will review the filing and, if appropriate, accept it on or before December 15th as applicable. The filing, and the City Manager approval, will be posted on the EWSI website and copies will be available at the business office of EWSI.

7.1 Rate Sheets

The Annual Drainage and Wastewater Treatment Rate Filing will set out the rate forecast for Stormwater and Sanitary Utility and Wastewater Treatment and will set out the service fees and charges for each calendar year. The rates will be calculated in accordance with this bylaw.

7.2 Drainage and Wastewater Treatment Service Quality Results

The Annual Drainage and Wastewater Treatment Rate Filing will contain the results of the drainage and wastewater treatment services quality measures, and the resulting financial penalty, if any, as set out in this Bylaw.

7.3 Consumption Deferral Account

The Annual Drainage and Wastewater Treatment Rate Filing will contain a report showing the annual variance between EWSI's water consumption forecast and actual consumption for the previous calendar year.

Schedule 4

Pro-forma Annual Drainage Rate and Wastewater Treatment Rate Filing

Table of Contents

Stormwater Utility Charges	1
Sanitary Utility Charges	2
Application Fees	3
Sanitary Sewer Trunk Charges	4
Hauled Wastewater	6
Commercial Wastewater Treatment Service	7
Wastewater Overstrength Surcharges	8
Customer Rebate for Wastewater Treatment Services	9
Pro-Forma Auditor's Report	10

Stormwater Utility Charges

January 1, $20\lambda\lambda$ to December 31, $20\lambda\lambda$

Applicable To all domestic service customers within the city of Edmonton.

Stormwater utility charges are levied on each premises and calculated based on a monthly rate using the following formula:

stormwater utility charge = $A \times I \times R \times rate$

A is: - the area of premises (m²), and

- the proportion of building lot area attributable to each unit for

multiple units sharing a single building or property

I is - the development intensity factor of 1.0, except for properties where

owners have demonstrated that they contribute significantly less stormwater per m² to the City's sewerage system during rainfalls than other similarly zoned properties by making an application for a reduction in the intensity development factor pursuant to this bylaw.

R is - the runoff coefficient based on the zoning of the premises:

R	Zoning
0.10	AG
0.20	A, RR
0.30	AP, US (schools)
0.50	RF1, RF2, RF3, RF4, RMH, IH, MA, AGU
0.65	RSL, RF5, RF6, RA7, RPL
0.75	RA8, US (except schools), PU
0.90	RA9, RMX, CNC, CSC, CB1, CHY, CO, IB, IM, AGI, DC
0.95	CB2, CMX

rate is: $\$\lambda.\lambda\lambda\lambda\lambda\lambda\lambda\lambda\lambda\lambda\lambda$

Sanitary Utility Charges

January 1, $20\lambda\lambda$ to December 31, $20\lambda\lambda$

Applicable

To all domestic service customers within the city of Edmonton.

Sanitary utility charges are calculated and levied on each premises on a monthly basis and are comprised of both:

(a) a Flat Monthly Service Charge based on the meter size for the premises according to the following rates; and

Meter Size	Flat Monthly Service Charge
16mm	\$ λ
20mm	\$ λ.
25mm	\$ λ
40mm	\$ λ
50mm	\$ λ
75mm	\$ λ
100mm	\$ λ
150mm	\$ λ
200mm	\$ λ
250mm	\$ λ
300mm	\$ λ
400mm	\$ λ
500mm	\$ λ

- (b) a variable monthly charge based on the rates below for monthly metered:
 - i. water consumption for the premises;
 - ii. sewer discharge for a premises on which a sewer meter has been installed in accordance with this bylaw; or
 - iii. water consumption for the premises as discounted by the application of a utility credit as approved in accordance with this bylaw.

Premises	Rate per m ³
All premises (except large wholesale)	\$ λ
Large Wholesale* with Collection System	\$ λ

^{*} Large Wholesale means a premises designated as such by EWSI in accordance with this bylaw.

Application Fees

January 1, $20\lambda\lambda$ to December 31, $20\lambda\lambda$

Application Type	20λλ
Application to release matter	\$ λ
Application to approve a compliance program	\$ λ
Records search	\$ λ
Application for reduction in stormwater utility credit	
Initial Application	\$ λ
Renewal application	\$ λ
Application for sanitary utility credit	\$ λ

Sanitary Sewer Trunk Charges

January 1, $20\lambda\lambda$ to December 31, $20\lambda\lambda$

Applicable

To all owners of a premises abutting an EWSI or City right-of-way in which there is a sanitary or combined sewer, the sanitary sewer trunk charge shall be levied when a development permit is issued for development, redevelopment, or renovation on the premises but if no development permit is required, when a building permit is issued for development, redevelopment, or renovation on the premises or when an application is made for sewer service to the premises.

For the purpose of calculating the sanitary sewer trunk charge, "secondary suite", "garden suite", and "garage suite", as well as reference to "use classes", have the same meaning as defined by the City of Edmonton Zoning Bylaw, Bylaw 12800, as amended.

Dwelling unit means a self-contained room or rooms with sleeping and cooking facilities, as defined in the City of Edmonton Zoning Bylaw, Bylaw 12800, as amended.

Residential means a premises used primarily for domestic purposes, where no more than four dwelling units are metered by a single water meter and the meter size to the premises is not greater than 50mm.

Sanitary sewer trunk charges are calculated as follows:

(a) For development, redevelopment, or renovation of premises for residential use classes:

Dwelling	20λλ Fee
1-2 dwelling units, excluding secondary suites, garden	\$ λ
suites, or garage suites	
2 dwelling units where one unit is a secondary suite, garden	\$ λ
suite, or garage suite	
3 or more dwelling units	\$ λ
Commercial	\$ λ
Industrial	\$ λ
Institutional	\$ λ

Notwithstanding the above, if a sanitary sewer trunk charge is levied on premises as a result of the redevelopment or renovation of premises, the sanitary sewer trunk charge will be calculated using the following formula:

sanitary sewer trunk charge = A - B

A is:

- the sanitary sewer trunk charge that would have been levied based on the above fees;

B is:

- the sanitary sewer trunk charge previously levied and paid for the premises prior to the redevelopment or renovation on the premises; or
- if the redevelopment or renovation of the premises is for residential use classes, then the sanitary sewer trunk charge that would have been paid had a sanitary trunk charge been levied with respect to the development that existed on the premises prior to the date of the redevelopment or renovation.
- if the result is a negative figure, the sanitary sewer trunk charge will be deemed to be \$0

Hauled Wastewater

January 1, $20\lambda\lambda$ to December 31, $20\lambda\lambda$

The fee for hauled wastewater is calculated based on vehicle size:

20 λλ Fee	\$ λ per axle, excluding the first steering axle

If the hauled wastewater contains settleable solids in a concentration greater than 100 mL/L, the hauled wastewater fee is double the amount per axle indicated in the table above.

Missed Appointment Fees

January 1, 20λλ to December 31, 20λλ

To all customers who do not keep a scheduled appointment with an EWSI representative

Missed Flood Assessment Appointment Fee	\$ λ
Missed Obstruction Removal Appointment Fee	\$ λ

No-Access Fee

January 1, $20\lambda\lambda$ to December 31, $20\lambda\lambda$

To all Customers who request EWSI to investigate sewer trouble but fail to provide access to the sanitary cleanout as required by EWSI's Drainage Services Guidelines.

No-Access Fee	\$ \(\lambda \) *

^{*}This is fee is subject to waiver or reimbursement if the Customer provides access to the sanitary cleanout as required by EWSI's Drainage Services Guidelines within 30 days of the initial investigation request.

Investigation Fee

January 1, $20\lambda\lambda$ to December 31, $20\lambda\lambda$

To all Customers who request EWSI to investigate sewer trouble where the result of the investigation indicates that the sewer trouble is caused by a private plumbing issue.

Investigation Fee	\$ λ for second and subsequent appointments

Commercial Wastewater Treatment Service

Applicable

To all commercial, industrial and institutional customers within the city of Edmonton which are serviced by or connected to the City's sewerage system.

To all customers not otherwise defined as Residential Wastewater Treatment Service customers.

Rates

Fixed Monthly Service Charge

 λ per month

Consumption Charge *

$0 \text{ m}^3 - 10,000.0 \text{ m}^3$	$\lambda \text{ per m}^3$
$10,000.1 \text{ m}^3 - 100,000.0 \text{ m}^3$	$\lambda per m^3$
>100,000 m ³	$\lambda per m^3$
* C	.1 .

^{*} Consumption is based on water meter readings unless otherwise approved by EWSI and the City.

Effective Dates

These rates effective April 1, $20\lambda\lambda$ to March 31, $20\lambda\lambda$ are subject to change in future years under the terms of this bylaw.

Wastewater Overstrength Surcharges

Applicable

Applies to a customer who releases wastewater to the sewer system that contains one or more constituents that exceed the concentration indicated herein.

Rates:

Wastewater Overstrength Surcharge

The Overstrength surcharge, applied to each m³ of water consumed, for each kilogram of surchargeable matter per m³ of wastewater that exceeds the concentration indicated for that matter shall be:

	Concentrations Above:
a) \$ λ for Biochemical Oxygen Demand (BOD)	300 mg/L
b) \$ λ for Chemical Oxygen Demand (COD)	600 mg/L*
c) \$ λ for oil and grease	100 mg/L
d) $\$ \lambda$ for phosphorous	10 mg/L
e) $\$ \lambda$ for suspended solids, and	300 mg/L
f) \$ λ for total kjeldahl nitrogen (TKN)	50 mg/L

^{*} Or twice the BOD concentration in the wastewater, whichever is greater.

Wastewater Additional Overstrength Surcharge

The Additional Overstrength Surcharge, applied to each m³ of water consumed, for each kilogram of surchargeable matter per m³ of wastewater that exceeds the concentration indicated for that matter shall be:

	Concentrations Above:
a) \$ λ for Biochemical Oxygen Demand (BOD)	3,000 mg/L
b) \$ λ for Chemical Oxygen Demand (COD)	6,000 mg/L*
c) \$ λ for oil and grease	400 mg/L
d) \$ λ for phosphorous	75 mg/L
e) \$ λ for suspended solids, and	3,000 mg/L
f) \$ λ for total kjeldahl nitrogen (TKN)	200 mg/L

^{*} Or twice the BOD concentration in the wastewater, whichever is greater.

Effective Dates

These rates effective April 1, $20\lambda\lambda$ to March 31, $20\lambda\lambda$ are subject to change in future years under the terms of this bylaw.

Customer Rebate for Wastewater Treatment Services

Applicable To all metered customers within the city of Edmonton in the event that the

Wastewater Treatment Service Quality does not meet the standard

performance level.

Rebate Customer Rebate

applied to the Fixed Monthly Service Charge

Residential Wastewater Treatment Service $\$ \lambda$ Commercial Wastewater Treatment Service $\$ \lambda$

Effective Dates The total penalty for the year will be applied as a rebate to customer

wastewater treatment bills in the year immediately following the

performance year.

Pro-Forma Auditor's Report

AUDITOR'S REPORT ON RATE SHEETS 1, 2, 3, 4, and 5

To the Senior Vice President responsible for Drainage Services, EPCOR Water Services Inc.

We have audited the rates for flat monthly service charges, variable charges, and service fees and charges included in Rate Sheets 1, 2, 3, 4, and 5 (hereinafter referred to as the "Rate Sheets") of EPCOR Water Services Inc. ("EWSI") for the 20xx Annual Drainage Rate Filing calculated in accordance with City of Edmonton Bylaw 18100 EPCOR Drainage Services Bylaw. EWSI management is responsible for the preparation and fair presentation of the financial information in the Rate Sheets. Our responsibility is to express an opinion on this financial information based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards and in conformance with the International Standards for the Professional Practice of Internal Auditing. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial information contained in the Rate Sheets is free of material misstatement. Such an audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the Rate Sheets.

In our opinion, the Rate Sheets for the 20xx Annual Drainage Rate Filing present fairly, in all material respects, the rates for flat monthly service charges, variable charges and service fees and charges effective January 1, 20xx to December 31 20xx, calculated in accordance with City of Edmonton Bylaw 18100 EPCOR Drainage Services Bylaw.

It is understood that this report has been prepared to facilitate EWSI's reporting as required by Bylaw 18100 and it is not to be referred to or relied upon for any other purpose.

(signed)	
Chartered Professional Ac	countants
City	
Date	