

Ts'uubaa-asatx Water and Sewer Services Fee Law (North Shore Estates), 2021
Fee Law Report

Background

Ts'uubaa-asatx ("TSU") has entered into a servicing agreement (the "**Servicing Agreement**") with the Town of Lake Cowichan (the "**Town**") entitled "Municipal Services Agreement" pursuant to which the Town agrees to provide services, including water and sewer, to a specified portion of the Cowichan Lake reserve identified in the Agreement ("**Phase I**"), in return for payment for these services by TSU. The fees payable under the Servicing Agreement are based on the fees payable by "Outside Users" pursuant to the Town's water, sewer and services bylaws. There are a maximum of 26 lots in Phase I.

Report

The *Ts'uubaa-asatx Water and Sewer Services Fee Law (North Shore Estates), 2021* (the "**Fee Law**") provides at Recital C that the fees established in the Fee Law are supported by a report setting out the projected cost of the water and sewer services (the "**Water and Sewer Services**"), how the costs of those services were determined, and the proportion of the total costs of the Water and Sewer Services that TSU will recover through the fees set out in the Fee Law.

The Fee Law levies fees for the Water and Sewer Services, payable by holders of interests in Phase I, at rates that are correlated to the Town's bylaws that apply to consumers of those services outside the boundaries of the Town, referred to as "Outside Users" in the Town's bylaws. As the fees in the Town's bylaws are changed by amendments to or replacements of those bylaws, the fees in the Fee Law will also change.

Specifically, the Fee Law provides that the fees established in the following Town's bylaws, plus 10%, are established as fees under the Fee Law:

- For the service of water provided to property within Phase I, the fees established from time to time as the residential "Outside user per unit" (or its equivalent) rate under the Town of Lake Cowichan Water Regulations and Rates Bylaw; and
- For the service of sewer provided to property within Phase I, the fees established from time to time as the residential "Outside user per unit" (or its equivalent) under the Town of Lake Cowichan Sewer Regulations and Rates Bylaw.

Projected Cost of the Water and Sewer Services

TSU's projected cost of providing the Water and Sewer Services can be broken down into 3 components.

The first component is the fee payable by TSU to the Town pursuant to the Servicing Agreement, which is triggered by the issuance of occupancy permits by TSU to holders of interests. Based on the projection that 3 occupancy permits will be issued in July 2021 and an additional 7 occupancy permits will be issued in October, 2021, the projected fee payable by TSU to the Town in 2021 for the Water and Sewer Services is \$4,758 or \$122 per month. It is anticipated that by the end of 2022, Phase I will be fully built out and a total of 26 occupancy permits will have been issued. Based on the Town's current bylaws, the sum of \$3,323.84 per month (\$39,886.08/year) will be payable by TSU to the Town pursuant to the Servicing Agreement when Phase I is fully developed. This component of TSU's cost of providing the Water and Sewer Services will always be revenue neutral as the fees charged by the Town to TSU pursuant to the Servicing Agreement will be passed onto the holders of interests in Phase I pursuant to the Fee Law.

The second component is the administrative cost for TSU to invoice and collect from the holders of interests for the Water and Sewer Services. Based on the projection that holders of interests of 10 lots will be invoiced for the Water and Sewer Services in 2021, the estimated administrative cost for TSU is \$200, calculated based on an hourly rate of \$20. When Phase I is fully built out, TSU's estimated administrative cost for invoicing and collecting for the Water and Sewer Services is \$500 per annum.

The last component is the estimated annual operation and maintenance cost of the water and sewer infrastructure installed by TSU to service the holders of interests in Phase I and subsequent phases. On the advice of its engineers (as per the letter appended to this report), the anticipated annual operation and maintenance cost for TSU's water and sewer infrastructure is \$6,200.

Based on the above projections, the total annual cost of the Water and Sewer Services to TSU, when the 26 lots in Phase I are fully built, will be (using the Town's rates for 2022):

\$39,886.08 (Town's fees); plus
\$ 6,200.00 (repair and maintenance)
<u>\$ 500.00 (admin.)</u>
\$46,586.08

and the total annual fees that TSU could expect from the Fee Law will be \$43,874.69 (\$39,886.08 plus 10%). This represents a cost recovery of approximately 94%.



Memorandum

To: Ts'uubaa-asatx
Attn: Aaron Hamilton
Date: March 11, 2021

From: Steve Underwood, P. Eng.
File No: 1525-021

RE: Estimated Phase 1 Operation and Maintenance Costs for Water and Sewer

This memo is provided as background information to the Ts'uubaa-asatx (TSU) as reference for the *Ts'uubaa-asatx Water and Sewer Services Fee Law (North Shore Estates), 2021 Fee Law Report*. TRUE has compiled the following information to provide an estimate of the annual costs related to operating and maintaining the services of water and sewer addressed in the above noted Fee Law Report.

The annual activities and expenses related to maintaining the water and sewer services to Phase 1 are estimated as follows. TRUE has estimated a total hourly cost of \$45.00 per hour for a water operator:

Water Supply

Inspection and Maintenance of Fire Hydrants (8), including flushing of water main

- 8 hours of inspection
- 8 hours of repair and maintenance
- \$500 in parts and supplies
- Total: \$1,220 / year

Exercising of water valves (7)

- 8 hours
- Total: \$360 / year

Water Quality Samples and Testing

- 4 hours per week
- \$500 testing fee
- Total: \$680 / year

Sanitary Sewer Collection

Inspection and Reporting of Manhole Condition

- 8 hours
- Total: \$360 / year

Flushing of sanitary gravity mains (once every 10 years)

- \$5 / m x 365 m ÷ 10 years
- Total: \$185 / year

Liftstation and Generator Inspection and Cleaning

- 16 hours
- \$2,500 in fuel and pump parts
- Total: \$3,220

Pumping Costs

- 864 L / d / lot x 26 Lots ÷ 8 lps = 0.8 hrs / d of pumping = 292 hours / year
- 3.7 kW Pump x 292 hours / year = 1,080 kWh / year
- \$0.093 / kWh x 1,080 kWh / year = \$100 / year power consumption
- \$0.2056 / d = \$75 / year connection charge
- Total: \$175 / year


Estimated Total Annual Cost of Supplying Water and Sewer Service to Phase 1

Description	Estimated Costs
Inspection and Maintenance of Fire Hydrants	\$1,220
Exercising of water valves	\$360
Water Quality Samples and Testing	\$680
Inspection and Reporting of Manhole Condition	\$360
Flushing of sanitary gravity mains	\$185
Liftstation and Generator Inspection and Cleaning	\$3,220
Pumping Costs	\$175
Total (rounded)	\$6,200

Based on the above, TRUE estimates that the TSU should expect to spend \$6,200 per year in the operation and maintenance of infrastructure related to providing the services of water and sewer to the 26 lots in Phase 1.

It should be noted that the above figure does not include any reserves for the eventual replacement or renewal of infrastructure at the end of its service life.

Regards,

Mar 11 2021

[Handwritten Signature]

Steve Underwood, P. Eng.

SU/dg/mm