

Sewer Development Charge - Rationale

City of Kelowna

BACKGROUND

To support proposed amendments to *Sewerage System User Bylaw No. 3480*, the rationale for increasing the existing Sewer Development Charge for select lots in the *Septic Removal Specified Area* is required. The requirement for providing costing rationale for any fees imposed is legislated by Section 194 (4) of the *Community Charter*:

“A municipality must make available to the public, on request, a report respecting how a fee imposed under this section was determined.”

As such, this document outlines the rationale for determining the increased *Sewer Development Charge* proposed as an amendment to *Bylaw No. 3480*. Although this document will not be included within amended *Bylaw No. 3480*, it would be made available to Council and any member of the public requesting background on costing rationale. Refer to footnote 1 on page 2 of APPENDIX A and section 1 of APPENDIX B for legal recommendation to support this approach.

The proposed increased Sewer Development Charge in Table 1 would only be applied to lots previously on septic serviced by completed sewer projects. The proposed increases to the *Sewer Development Charge* are based on the 2021 Development Cost Charge (DCC) unit rates and further supported by historical average costs for Third-party Work Order (TPWO) service installations. This document outlines the rationale for the various service connection costs by type.

Table 1: Sewer Development Charge by service type.

Service Type	Sewer Development Charge (rounded to nearest \$500)
100-mm residential service	\$7,500*
150-mm multi-family/commercial service	\$10,000
Typical industrial service or >150-mm service	\$16,000

* Sewer Development Charge reduced from cost estimate to reflect ICIP grant requirements.

2021 DCC UNIT RATES

The Development Cost Charge (DCC) unit rates are established in collaboration with the local development community and their use for informing the City’s various DCC programs is well established. To align with other City programs and cost estimates, the 2021 DCC unit rates were used to create hypothetical servicing costs for the three service types outlined in **Error! Reference source not found**. Although slight alterations were made to the traffic control line item to reflect project scales, the cost estimates are in general alignment with the DCC project cost estimating process. Although the estimated cost of a typical 100-mm residential service is \$9,135, due to commitments made at the time of an *Investing in Canada Infrastructure Program (ICIP)* grant application, only \$7,500 will be charged for such services.

Table 2: 100mm RESIDENTIAL SERVICE (2.5 M DEPTH, COLLECTOR ROAD)

Description	UNIT	UNIT PRICE	QUANTITY	COST
100mm ø DR35 PVC	lin. m.	\$170	12.5	\$2,125
Cold milling	sq. m.	\$6.50	18	\$117
Granular base	cu. m.	\$80	4	\$320
Imported backfill (x-sec A = 3 m ²)	cu. m.	\$40	30	\$1,200
Trench rock removal (25% of trench)	cu. m.	\$125	7.5	\$938
Asphalt Lower (50mm) & Surface course (50 mm)	sq. m.	\$34	18	\$604
Concrete curb and gutter, c/s granular base	lin. m.	\$125	4	\$500
Sidewalks, c/w granular base	sq. m.	\$115	6	\$690
Sodding	sq. m.	\$9.50	12	\$114
Traffic control*	hr ⁻¹	\$100	8	\$800
SUBTOTAL				\$7,416
		Mob/Demob	2.0%	\$148
		Contingency	20%	\$1,483
		Administration	8%	\$593
TOTAL				\$9,640

* Alternative unit rate to reflect project S

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Table 3: 150-MM MULTI-FAMILY/COMMERCIAL SERVICE (2.5 M DEPTH, COLLECTOR ROAD)

Description	UNIT	UNIT PRICE	QUANTITY	COST
150mm Ø DR35 PVC	lin. m.	\$180	12.5	\$2,250
Cold milling	sq. m.	\$6.50	18	\$117
Granular base	cu. m.	\$80	4	\$320
Imported backfill (x-sec A = 3 m ²)	cu. m.	\$40	30	\$1,200
Trench rock removal (25% of trench)	cu. m.	\$125	7.5	\$938
Asphalt surface course (50 mm)	sq. m.	\$18	18	\$324
Asphalt lower course (50 mm)	sq. m.	\$16	18	\$288
Concrete curb and gutter, c/s granular base	lin. m.	\$125	4	\$500
Sidewalks, c/w granular base	sq. m.	\$115	6	\$690
Sodding	sq. m.	\$9.50	12	\$114
Traffic control*	hr ⁻¹	\$100	10	\$1,000
SUBTOTAL				\$7,741
		Mob/Demob	2.0%	\$155
		Contingency	20%	\$1,548
		Administration	8%	\$619
TOTAL				\$10,063

* Alternative unit rate to reflect project scale.

Table 4: 150-mm INDUSTRIAL SERVICE (2.5 M DEPTH, COLLECTOR ROAD)

Description	UNIT	UNIT PRICE	QUANTITY	COST
150mm Ø DR35 PVC	lin. m.	\$180	12.5	\$2,250
1050 mm inspection manhole	Each	\$4,200	1	\$4,200
Cold milling	sq. m.	\$6.50	18	\$117
Granular base	cu. m.	\$80	4	\$320
Imported backfill (x-sec A = 3 m ²)	cu. m.	\$40	30	\$1,200
Trench rock removal (25% of trench)	cu. m.	\$125	7.5	\$938
Asphalt surface course (50 mm)	sq. m.	\$18	18	\$324
Asphalt lower course (50 mm)	sq. m.	\$16	18	\$288
Concrete curb and gutter, c/s granular base	lin. m.	\$125	4	\$500
Sidewalks, c/w granular base	sq. m.	\$115	6	\$690
Sodding	sq. m.	\$9.50	12	\$114
Traffic control*	hr ⁻¹	\$100	12	\$1,200
SUBTOTAL				\$12,141
		Mob/Demob	2.0%	\$243
		Contingency	20%	\$2,428
		Administration	8%	\$971
TOTAL				\$15,783

* Alternative unit rate to reflect project scale.

HISTORICAL COSTING DATA

The TPWO program allows residents and businesses that require a new service connection to limit service connection costs. By providing an in-house option for new service connections, the residents and businesses are available to avoid some of the ancillary costs and administrative requirements of using a private engineering and contracting team (e.g., consulting fees, servicing agreement, performance security, insurance, road usage permit).

Due to the nature and scope of the TPWO program, servicing costs truly represent just the cost of providing a service line from the public main to the property line. This scope in cost aligns with the proposed Sewer Development Charge and recent legal opinions on authority to collect such a charge (i.e., from public sewer main to property line).

Based on a review of historical TPWO costs for sanitary sewer service installs for single-family residential lots (past five years), a range in values between \$5,000 and \$15,000 was noted. Once again, supporting the proposed \$7,500 Sewer Development Charge.

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OTHER SOURCES SUPPORTING MINIMUM SERVICING COST

Other than the DCC unit rate cost estimates and TPWO costs outlined above, other sources of information supporting a minimum \$7,500 charge for a single-family residential service include:

- Average cost of installing just service lines in the Clifton Road North – Connector 1, 2, and 3 connection areas.
- The Investing in Canada Infrastructure Program (ICIP) grant application to fund design and construction of multiple sewer connection areas in the City references a \$7,500 charge to be levied as residents and businesses connect to the completed public sewer system (see page 11 of *Kelowna Septic Field Elimination Project* – ICIP Grant Application).