# 2019 – Prepaid Service Rate Evaluation

### Water and Sewer Servicing

#### Water and Sewer Mains, Trunk Sewers, Primary Water Mains and Lift Stations

- 1) Water, Sewer Mains and Service Connections A large tender was awarded for construction of services within the Aspen Ridge neighbourhood. The tender resulted in local as well as trunk sewer and primary water main services installed. Information from this tender was used to calculate this year's rate. The increase is small and is primarily due to the overly large depths experienced within the neighbourhood. Another large tender is expected to be awarded later this year for construction starting in the Brighton neighbourhood. Information from the tender in Brighton and a further tender planned for Aspen Ridge next year will be used to set the final rates in 2020. A slight change is recommended for the water and sewer direct service rates.
- 2) Trunk Sewers and Primary Water Mains primary water mains include the larger piping systems that serve entire neighbourhoods, typically equal or greater than 400 mm in size. Primary water mains have, in most cases, lagged initial development and may include a variety of components that are not necessarily utilized consistently for each job, such as pumped drain structures or concrete bulkheads. A common component is piping, however, this can also vary between sizes, material type, construction required through pavement structures or undeveloped land. We are monitoring some of the components that are utilized in water and sewer construction and have noted that plastic polyethylene has stabilized since last year. Depending on the size and the length of individual pipes needed in any one contract, different types of piping materials are utilized. In 2019 we are constructing two projects that include various sizes of piping. No change in the primary water main levy rate will be implemented in 2019.

Trunk sewers are essential for all sectors and include ponding and piping systems that can include storm pipes up to 3.0m in size and sanitary sewers of 1.2m in diameter constructed 14m deep. The Transportation and Construction Department has extensive studies and includes large geographic catchment areas to determine the overall city wide rates. Within the Administration's studies, sanitary and storm sewer piping comprises 74.7% of the trunk sewer levy cost. The remaining 25.3% of the levy funds storm ponds, where the primary cost is the excavation of large amounts of earth material. Minimum pipe sizes for residential include sanitary trunk sewers of 450mm or greater with a flow rate of at least 68 l/s and storm trunk sewers of 1350mm or greater. In 2019 we have adjusted our rates based on further detailed information of various options for a future proposed sanitary trunk river crossing. This information, along with information from Statistics Canada for items included for these types of projects used during construction derives the trunk sewer rate.

From the results of past information and current cost curves and studies the trunk sewer rate is recommended to increase by 1.4%.

3) Lift Stations – This is a smaller levy that funds the construction of lift stations within specific neighbourhoods that utilize lift station services. The lift station levy is charged only on neighbourhoods that require this service. No lift stations currently are needed within the Industrial area of the City. No changes are suggested for the lift station levy in 2019.

Taken as a whole, the net price change for various services and calculated frontages has resulted in an adjustment for 2019. It is recommended that the general construction rate change by the following percentages, with similar changes noted within Appendix 1 for other zoning classifications:

Water and Sewer Mains	0.9%
Water and Sewer Connections	0.0%
Trunk Sewers	1.4%
Primary Water Mains	0.4%
Lift Stations	0.0%

### <u>Roadways</u>

Grading, Sidewalks, Paving, Lanes, Buffers, Fencing and Arterial Roadways

The 2019 program is primarily centered around three arterial projects on Taylor Street, Wanuskewin Road and McOrmond Drive with additional carryover construction occurring in Aspen Ridge and the Marquis Industrial area. Areas of noted significance are as follows:

1) Grading and Buffers – This component involves the excavation, transportation and placement of large quantities of dirt to facilitate the overall drainage pattern within a development area. In 2019 to date, the various earthwork projects were analysed for stripping, fine grading and seeding. Embankment costs continued to be in a slowly rising band over the last number of years. In 2017, we reported that excavation prices had increased in a range up to \$5.00 per cubic metre which was above the prices previously experienced. In 2019, averaging a number of years of construction, prices are now in a range up to \$5.65. We are not recommending any increase in these rates this year until further analysis is completed after the Holmwood Trunk Sewer project is tendered that will see dirt excavation of over 500,000 cubic metres. The grading rate is recommended to remain the same for 2019.

The main components within the Buffer levy are berming which also utilizes the movement of earth material. As noted previously, excavation costs have been rising while seeding has been stable. The net effect will be to leave the buffer rate the same this year.

- 3) Sidewalk and Curbing – This service is normally tendered as part of the overall roadway contract. No new direct service roadway contracts were tendered in 2019. Unit prices have been compared for this category with the various arterial roadway contracts tendered. Prices have generally stayed within an acceptable range for this category of expense. The department is exploring the utilization of placing base gravel material beneath the sidewalk to assure a proper foundation. In 2018, this increased the price of sidewalks by \$15.00 per lineal metre and was used in some instances within Aspen Ridge due to poor subgrade. This measure is not currently a permanent change in standards and will be monitored in the future to determine the effectiveness in mitigating cracks and other failures experienced previously with poor quality elastic soils. Different components are included within residential versus multi-family/commercial areas, which are then blended together in arriving at a rate for each classification. As a result, the multi-family/commercial rate, used primarily in suburban areas and on collector roadways, is traditionally 1.7 times greater in cost than the residential rate. No additional analysis for this component was needed this year. The residential, commercial and industrial rates are recommended to not undergo a rate change in 2019.
- 4) Paving, Lanes, Arterial Roadways and Interchanges Unit prices from the Taylor Street, Wanuskewin Road and McOrmond Drive tenders were analysed this year as well as an analysis of frontage from various neighbourhoods in determining the cost for these prepaid service categories.

Prices as a whole for this component have increased slightly this year. For example in 2018 the average asphalt price for City local prepaid service contracts was \$127.00 per tonne. In 2019 the average price was \$137.66 or a change of approximately 8%. Stats Canada has reported that asphalt on average over the last reported 12 month period increased by 11%. The City has again been somewhat sheltered overall from these increases probably because we have had additional contractors bidding on many of our projects and the price of aggregate that we utilize extensively within our roadway contracts appears to have moderated. Also, we are attempting to use other types of products within the geotextile family that have resulted in a reduction of subbase and/or base material that has benefitted us in cost savings. In 2019, we are changing the rate for an added component noted in the utility section of this report. Street lighting concrete bases and trenched conduit will be installed by the roadways contractor which will form the basis for an increase in the rates. The net result after considering contract costs and available frontage is a recommended increase in our rates of 1.7% to 1.8% for paving and arterial roadways. Lane costs are being increased due to a change in the funding for this category. In the past, the property realized reserve funded the paving portion of the lanes which at one time was not a standard for the City. Paving of lanes has become a standard and a change in the structure of the lanes over the years has also been instituted over time. The consensus is that lanes should be exclusively funded from the prepaid service reserves and therefore the total cost is now reflected within the rate.

The interchange levy is one source of funding for the construction of interchanges where the construction benefits new land development. Within the Administration's study areas, costs have been extrapolated to determine a projected value for nine interchanges identified as requiring funding from the interchange levy. Information from the interchanges under construction at McOrmond and Boychuk Drive were previously analysed and a change in the rate was determined a number of years ago. The City traffic model is currently being studied further to update the amount of traffic generated from future growth. No change has been implemented for interchanges in 2019.

The net effect on the prepaid service rates for this category is as follows:

Grading	0.0%
Buffers	0.0%
Fencing	0.0%
Sidewalks and Curbing	0.0%
Paving	1.7%
Arterial Roadways	1.8%
Interchanges	0.0%
Lanes	47.3%

## **Utilities**

### Street Lighting, Gas and Underground Electrical

City developed land includes a prepaid levy for street lighting, gas and underground electrical servicing. Private developers contract directly with the respective crown corporation for telephone and gas servicing. A data base exists that includes three decades of street lighting service applications where costs and revenues are tracked. Street lighting service is provided exclusively from Saskatoon Light & Power. Labour costs represent a predominate portion of the street lighting rate. Material price changes have been minimal this year with a decrease in the price of copper utilized in cable. Saskatoon Light and Power conducts servicing in the same administrative manor as other utilities. This entails preparing a fixed quotation for the particular area or phase that is being developed. In 2019, it was decided that the delivery of street light bases and conduit could be more efficiently constructed during the roadway phase. This approach was approved at the Developers' Liaison Committee meeting during this last winter and has been implemented where applicable in 2019. SL&P is involved in all of the electrical aspects of wiring and connecting the street lighting system to the electrical grid. As a result of these measures, the street lighting charge has been reduced by \$17.20 per front metre for 2019.

The Saskatchewan Energy Corporation provides natural gas servicing to all classifications of property. The gas servicing levy is composed of a header allocation charge that is calculated by the utility for each neighbourhood, as well as a gas distribution charge. SaskEnergy absorbs a portion of these costs by applying a capital contribution investment charge of \$1,145 per lot which has not changed this year.

SaskEnergy also charges a lane stubbing cost of \$1,200 per lot. No change in the rate has occurred in 2019.

New underground electrical service within Saskatoon is almost entirely provided by the Saskatchewan Power Corporation. Both the crown corporation and the City provide a \$1,300 per lot capital contribution in each of their respective franchise areas, however, SaskPower almost exclusively provides residential servicing. Last year we reported that SaskPower had dramatically reduced the cost of servicing by renegotiating servicing agreements with other utilities that share services in the same trench. At that time, the rate was reduced by 64% due to these measures. A number of applications were received after the rate had been established which indicated that the rate would not be able to be established quite as low as we had indicated and an adjustment will be made for 2019 as noted below. This rate has a tendency to increase in cost quicker than other rates over time due to the overall cost increasing and the subsidized portion such as the capital contribution and the fixed trench agreements not changing which is absorbed through the rate.

Also for this year in 2019, we have received few electrical applications and those applications include an inordinate amount of one sided servicing. This is not representative of normal servicing and as a result we will include those applications together with a larger representative sample in 2020. The Administration's model indicates that the current rate is recommended to increase for 2019 to \$710.00 per lot.

The recommended change to the utility rates is as follows:

Street Lighting	-17.6%
Gas Servicing	0.0%
Underground Electrical Servicing	7.7%

## **Administration**

### Planning, Municipal Administration, Servicing Agreement Fees, Inspection

The servicing fees for the administration of the land development program are increased each year in tandem with possible changes to the standard collective agreement and the car allowance rate, where applicable. For 2019, the anticipated change is between 0.7 and 1.2% for these services.

### Parks and Recreation Levy, Community Centres

The Parks and Recreation Levy is a significant portion of the total offsite levies and is submitted as a separate report from the Community Services Department. The inclusion within this report is to illustrate completeness of the prepaid service rate schedule.

The levy for community centres has been implemented as a separate charge per residential neighbourhood, calculated on a front metre basis for all saleable property. This levy will also be reported on by the Community Services Department.