2021 – 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 – Additional construction was added to the work that started in 2020 for local servicing, trunk sewers and primary watermains. The local servicing resulted in an analysis of costs for 2021. Additionally, Construction and Design canvased a number of pipe suppliers and contractors to determine the effects of recent price increases that were experienced within the unit prices that we received. The total cost is offset by positive dense frontage within the Brighton neighbourhood. The various suppliers noted that polyvinyl chloride piping has increased at a compound rate over the last five years of approximately 5% per year. Additionally, many of the piping components used in the City's contracts such as valves, hydrants etc. have had larger price increases. The water and sewer connection service uses many of the same type of components that are used in the main line contracts. In 2020, we were able to not have any increase for this component, however, in 2021 a rate increase of 4.9% is recommended for the 2021 water and sewer direct service rates.
- 2) Primary Water Mains and Trunk Sewers – 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. Depending on the size and the length of individual pipes needed in any one contract, different types of piping materials are utilized. In 2021, a 600mm primary watermain was installed a distance of 570 metres on Neault Road. Costs were within budget, but approximately 4% higher than a similar contract constructed lately in Aspen Ridge. A major adjustment to the rate is necessary, however, for a change in the overall scope of the levy. An additional primary watermain piping system is needed on the west side of the City starting from the Water Treatment Plant and extending to the Blairmore sector identified in project 1436-8 Blairmore Primary Watermains. This service will have more than one function and is being cost shared both from the Primary Watermain Reserve as well as the Waterworks Capital Projects Reserve. The cost of the increase is being mitigated by absorbing the increase over a threeyear time period between 2021-2023 which will also mirror the timing of the project. The primary water main levy is recommended to be increased by 11.3% for residential property and 2.7% for Industrial zoned lands.

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 being phased in from 450mm to 600mm or greater with a flow rate of at least 68 l/s and storm trunk sewers of 1350mm or greater. The major trunk sewer project from 2020 is beginning to wind down and a small project was started in 2021 within Kensington for a storm pond and piping. In addition to this tender, 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 2.3% in 2021 for residential zoned property and increase by 2.3% for industrial property.

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 2021.

Taken as a whole, the net price change for various services and calculated frontages has resulted in an adjustment for 2021. It is recommended that the general construction rate change for various zoned property by the following percentages:

	Residential/ Commercial	Industrial
Water and Sewer Mains	4.9%	4.9%
Water and Sewer Connections	4.9%	-
Trunk Sewers	2.3%	2.3%
Primary Water Mains	11.3%	2.7%
Lift Stations	0.0%	0.0%

<u>Roadways</u>

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

In 2021, a number of direct servicing projects centred around both the Brighton and Aspen Ridge neighbourhoods. In addition, a carryover arterial road project was completed along McOrmond Drive. 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, we reported that excavation prices had increased in a range up to \$5.65 per cubic metre which was above the prices previously experienced. In 2020, averaging the two main contracts, prices moved into a range of approximately \$7.53 per cubic metre with a very large amount of cubic metres. In 2021, roadway projects with various earthwork components were analysed for stripping, fine grading and seeding. On average, embankment cost continued to rise as noted in the Brighton and Aspen Ridge roadways contract. The grading rate has not been adjusted since 2018 and is recommended to change to meet the increasing costs of earth material handling experienced.

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 again been stable. The net effect will be to augment the buffer rate this year. The industrial rate is impacted more than the residential rate due to the various components that are changing within this rate.

- Sidewalk and Curbing This service is normally tendered as part of the direct 2) service roadway contract. New contracts were established in both Brighton and Aspen Ridge. A total of 9,000 metres of sidewalk were scheduled to be constructed. Changes to standards have started to be implemented within the rate which has encompassed wider sidewalks within residential areas. Unit prices have been compared for this category to previous years prices with modest changes noticed. In general, prices have moved higher within a range for the last three years totalling 2.1% to 11.7% for various components. These different components are included within residential versus multifamily/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. Additionally, the amount of frontage is also considered which may vary depending on the particular development. No changes were implemented to this rate since 2018, however, the residential, commercial, and industrial rates are recommended to undergo a modest rate change in 2021.
- 3) Paving, Lanes, Arterial Roadways, and Interchanges Unit prices from last year's Taylor Street and McOrmond Drive contracts and this year's Aspen Ridge and Brighton residential tenders were analysed 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 been very steady to rising during the tendering period which included a number of bidders. Statistics Canada last year reported initial falling component prices for most categories on the prairies prior to May of 2020 with rising prices since then throughout both the 2020 and 2021

construction season. The prepaid rates have been partially sheltered from some of the increases because of the additional interest in these tenders, however, unit prices as studied over the last number of years have started to amplify. Where possible we have utilized other products that involve geotextiles to reduce the amount of gravel base and subbase within the overall structure which has been able to reduce our costs. No changes to the rates were implemented in 2020, however, a change in the rates is recommended for the Paving, Lanes, and the Arterial roadway rate this year.

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 2021.

4) Signing and Signals - This rate is used for the erection of signals and street signing within neighbourhoods. This item encompasses extensive labour and utilizes various electronic and metal products which have increased in 2021. The rate is required to increase by 5.8% to cover costs related to recent labour contracts and material prices.

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

	Residential/	
	Commercial	Industrial
Grading	5.9%	5.9%
Buffers	5.4%	13.8%
Fencing	7.2%	7.2%
Sidewalks and Curbing	3.1%	3.0%
Paving	3.1%	3.1%
Arterial Roadways	3.2%	3.2%
Interchanges	0.0%	0.0%
Lanes	2.5%	-
Signing & Signals	5.8%	5.9%

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.

- 1) Street Lighting 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 portion of the street lighting rate. Saskatoon Light & 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. The changes in the collective agreements have resulted in a small change to the labour component of the rate. Many of the structural components for street lighting were previously purchased prior to increases in steel prices which reduced the potential increase in the rate. The net change is an increase of the residential rate of 1.1% with similar changes to other zoned categories for 2021.
- 2) Gas Servicing Levy 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.
- 3) SaskEnergy also charges a lane stubbing cost of \$1,200 per lot. In 2021, taking into account 405 residential lots that included an average number of one sided and or laned properties the rate needs to be altered. The recommendation is for the rate to be increased by 9.3%.
- 4) Underground Electrical 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. In 2018, 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% from a value per lot of \$1,847.00 with a very limited number of applications to determine a rate. Since then, we have been averaging additional applications each year to determine where the rate will ultimately be established which has slowly decreased the rise in calculated cost. In 2021, we have processed an additional 768 lots which has allowed us to take into account further applications where a more accurate average type of lot has been experienced including one sided servicing and also laned lots. 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. These costs are then absorbed through the rate.

The Administration's model indicates that the current rate is recommended to increase for 2021 to \$968 per lot.

The recommended change to the utility rates is as follows:

Street Lighting	1.1%
Gas Servicing	9.3%
Underground Electrical Servicing	12.6%

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 2021, the collective agreements were ratified and the change is between 1.5% and 1.8% 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.