

- 1. Facility Flat Rate Model: On-Net
  - **1.1.** Current Fees, One-Year Agreement (\$/month)
  - 1.2. Non-Recurring Fees for set up of a fibre circuit, (\$/circuit)
- 2. Customized Rate Model
- 3. Additional Services
  - 3.1. Redundancy
  - 3.2. Expedited Service
  - 3.3. Rerouting a Fibre Circuit
  - 3.4. Testing and Test Reports
  - 3.5. Service Calls Unrelated to City Fibre
  - 3.6. Calgary Internet Exchange
- 4. Definitions
- 1. Facility Flat Rate Model: On-Net
  - 1.1. Current Fees, One-Year Agreement (\$/month)

ON-NET				
Site One	Site Two	Monthly Cost (\$/mo)		
Business	Business	\$1,304		
Business	Data Centre	\$1,304		
Data Centre	Data Centre	\$1,304		
Wireless Tower	Data Centre	\$1,304		

- Rate is subject to an annual 3% increase.
- The fees in the table refer to one (1) month for one (1) fibre circuit.
- Secondary circuits for redundancy purposes are the same price.
- Routing for redundant circuits will be determined by The City. Should a customer require a specific route the cost may be subject to additional fees.
- The City of Calgary terminates its cable in the main telecommunications demarcation room. It is the responsibility of the customer to provision any inbuilding cabling in order to establish continuity for the circuit.



#### **One Time Fee** Monthly Cost (\$/mo) High Level Estimate \$0 (Note 1) Construction Quotes **Detailed Quote** \$2,500 (Note 2) Fibre Builds **OFF-NET to ON-NET** TBD (Note 3) Alignment and Testing **Provisioning Fee** \$2,500 (Note 4)

## 1.2. Non-Recurring Fees for set up of a fibre circuit, (\$/Circuit)

**Note 1:** A high level estimate is performed by taking average prices and applying it to the current conditions. High Level Estimates are equivalent to a best guess and does not represent a guarantee of costs and/or schedule.

**Note 2:** This fee is non-refundable unless the project commences at which time the fee will be applied to the build cost.

**Note 3:** Any facility that is OFF-NET requires construction to become ON-NET. Construction costs will vary and is dependent on location and a number of environmental factors. The City will determine and provide an estimate for the last mile build cost. The customer is responsible to fund the last mile build cost but will be reimbursed the full value. The City as the ultimate owner of the asset will reduce the lease cost until the full value of the last mile build cost is recovered by the customer. Please contact The City for further information.

**Note 4:** A provisioning fee includes all the necessary work required to create an end-to-end circuit (splicing, patching etc) as well as testing and certification.

## 2. Customized Rate Model

Connectivity requirements may extend beyond interconnecting facilities like office buildings or Data Centres. Connectivity to SCADA systems, Wi-Fi antennas, sensors, cameras and all that makes up the internet of things will require connectivity.

Fibre offers a highly secure and reliable circuit for many applications that require low bandwidth but high reliability. Often these network configurations are not point to point or they may use a diverse topology e.g. daisy chain the fibre. In these cases a linear rate may apply if The City deems it more appropriate. Customizable Rate Models will be determined through a needs assessment.



#### 3. Additional Services

## 3.1. Redundancy

Additional fibre circuits that serve as redundant routes will be subject to the same price structure as the primary fibre circuit.

#### 3.2. Expedited Service

The City of Calgary's normal business hours are M-F between 08:00 -16:30 hrs. Work that is required outside the normal working day may be subject to additional fees and resources.

#### 3.3. Rerouting a fibre Circuit

Performed between 08:00-16:30 hrs Weekdays Monday – Friday	\$2,500
Additional Fee: Required outside regular working hours.	\$4,000

#### 3.4. Testing and Test Reports

The cost of provisioning a fibre circuit includes initial testing and reports for the given alignment. Should the customer require additional testing and characterization of the fibre circuit additional fees will apply. This situation may arise if new hardware is being considered for deployment and current characterization tests are required to mitigate incompatibility issues.



#### 3.5. Service Calls Unrelated to City Fibre

From time to time a network issue may seem like an issue with the fibre when in fact it may be due to something else. Should City technicians be called out to recharacterize or troubleshoot a problem unrelated to City Fibre a cost for the service will be applied. The service is billed in four hour intervals.

Technician Services - 4 hours during regular working hours	\$1,000
Technician Services - 4 hours after normal working hours	\$2,000



## 3.6. Calgary Internet Exchange

The City of Calgary is hosting the Calgary Internet Exchange (YYCIX) switch in its data centre. Connecting to the IX is accomplished through a cross connect between a providers switch and the IX switch or between a City fibre panel and the IX switch. Customers leasing City fibre can connect into the YYCIX switch without incurring a cross connect fee.

Cross connection from provider switch to YYCIX switch	\$50 / mo
Cross connection from City fibre to YYCIX switch	\$0

### 4. Definitions

- 4.1. Fibre Circuit: is defined as one fibre strand aligned between two points terminating either into a patch panel, connector or splice point.
- 4.2. ON\_NET: A facility that has City fibre terminating in the designated main telecommunication demarcation room.
- 4.3. OFF-NET: A facility that does not have City fibre terminating in the building.
- 4.4. OTDR: Optical Time-Domain Reflectometer (OTDR) is a testing device used to determine the characteristics of a fibre alignment.