



City of Grand Forks
Staff Report
Committee of the Whole – February 10, 2020

Agenda Item: Small Cell Discussion (Info Only)

Submitted by: Engineering Department, David Kuharenko, PE (Assistant City Engineer)

For Information Only

BACKGROUND:

This staff report is intended to provide some advance background information on this topic. In September of 2018, the Federal Communications Commission (FCC) adopted an order in its ongoing proceedings to streamline the rollout of infrastructure for broadband services. This order was effective on January 14, 2019. This included small cells for 4G and 5G services. In the near future, the Committee of the Whole will be seeing a draft ordinance and master agreement to comply with this order regarding the installation of small cells in the city's right of way. This will provide the framework for cell phone carriers to attach small cell equipment to our existing infrastructure.

When most people think of a cell phone tower they think of a large tower that is 100+ feet tall with a number of antennas on top. Small cell facilities are low powered antennas used to provide wireless telecommunication services. A small cell facility is typically mounted on existing structures like a street light poles or utility poles with antennas mounted on top that are no more than three cubic feet in volume (approximately the size of a 20 gallon trash can). Though there will be an addition of small cells, it is likely that the large towers will remain to provide overall umbrella coverage.

The FCC's goals are to provide nationwide 5G wireless network and remove obstacles that may inhibit the deployment of 5G. In general the FCC order can be summarized into three main points:

- Fee restrictions for both site applications and annual payments
- State and local governments cannot prohibit deployment
- Shot clock for review and applications

The order sets the rules for the fees and indicates what it considers as maximum acceptable fees. A one-time fee of \$500 for up to five small wireless facilities mounted on existing poles or structures, and \$100 for each additional facility, and recurring annual fees of \$270 per facility. Though fees could be increased, the burden of justifying those fees would fall to the city.

Though the ruling indicates that state and local governments cannot prohibit deployment, we still have the ability to put in place requirements for safety and aesthetics within the community.

With the installation of a small cell at an existing street light location, staff has the understanding that the street light pole will likely need to be replaced with a pole that is structurally capable of supporting the loads of the small cell equipment. It is likely to be proposed that the cell phone carriers will be required to replace the existing pole at their cost and provide documentation from a licensed professional engineer indicating the structural sufficiency of the pole. In the event that a pole is hit by a vehicle or otherwise damaged, the carrier will likely be required to provide replacement poles at their expense. The carriers will also be required to provide their own electrical and communication infrastructure to support their equipment. Other requirements that will likely be seen in the documents will be more aesthetic in nature regarding spacing between small cells.

In order to prevent the state and local governments from administratively denying these applications through inaction or a lack of response to the application, the FCC has implemented a shot clock for review and applications. This means that if an application is submitted and not responded to within the designated time, it will be automatically approved.

In order to comply with the FCC order, the city should have an ordinance, master agreement and application process in place in order to allow carriers the ability to install small cell equipment in our right of way.

One national estimate for the number of anticipated small cell locations is approximately 60 small cells per square mile per carrier. Grand Forks is approximately 20 square miles in area, and there are four primary carriers, so there is a potential of approximately 4,800 small cell locations throughout the city. It is anticipated that the roll out will start slowly and increase over time.

ANALYSIS AND FINDINGS OF FACT:

- An Ordinance and Master Agreement will be presented to the Committee of the Whole at a future date.
- It is currently uncertain how much staff time will be required to administer the small cell program.
- It is anticipated that current staff will administer the small cell program and will evaluate staffing needs as the program develops.

SUPPORT MATERIALS:

- Image of a small cells located on UND campus

