## **Appendix A Modifications to Existing Authorization**

Technical parameters for Sprint's wireless backhaul testing

### Modifications and new test sites

#### Modification – New location for Hub site

Hub site will be moved to:

Hub address: 6220 Sprint Parkway Lat. Long. North 38.915, West -94.657 Transmitter Power: 33 dBm (2 watts) Number of Transmitters: 2 (2x2 MIMO)

Antenna Gain: 17.5 dBi

Single Tx E.I.R.P. 50.5 dBm (112.2 watts)

Total Power for two Tx E.I.R.P. 53.5 dBm (224.4 watts Max.)

Antenna center of Radiation 66 feet AGL

Antenna Beam width: 65 deg.

Azimuth 345.5

# Existing authorization - azimuth change only:

Remote: 6500 Sprint Parkway, Overland Park, KS

Building height 60 feet AGL

Lat. Long. North 38.919, West -94.659 Transmitter Power 33 dBm (2 watts) Number of Transmitters 2 (2x2 MIMO)

Antenna Gain 17 dBi

Single Tx E.I.R.P. 50 dBm (100 watts)

Total Power for two Tx E.I.R.P. 53 dBm (200 watts Max.)

Antenna center of Radiation varies in testing from 60 feet AGL (6 feet below building parapet)

to 24 feet AGL for Non Line of sight testing.

Antenna Beam width: 65 deg. Azimuth 158.7 degrees

### New Remote

Remote: 6180 Sprint Parkway Building height 60 feet AGL

Lat. Long. North 38.918, West -94.658 Transmitter Power 33 dBm (2 watts) Number of Transmitters 2 (2x2 MIMO)

Antenna Gain 17 dBi

Single Tx E.I.R.P. 50 dBm (100 watts)

Total Power for two Tx E.I.R.P. 53 dBm (200 watts Max.)

Antenna center of Radiation varies in testing from 60 feet AGL (6 feet below building parapet)

to 24 feet AGL for Non Line of sight testing.

Antenna Beam width: 65 deg.

Azimuth 165.5 degrees

### New Remote:

Remote: 6000 Sprint Parkway Building height: 60 feet AGL

Lat. Long. North 38.92, West -94.656 Transmitter Power 33 dBm (2 watts) Number of Transmitters 2 (2x2 MIMO)

Antenna Gain 17 dBi

Single Tx E.I.R.P. 50 dBm (100 watts)

Total Power for two Tx E.I.R.P. 53 dBm (200 watts Max.)

Antenna center of Radiation varies in testing from 60 feet AGL (6 feet below building parapet)

to 24 feet AGL for Non Line of sight testing.

Antenna Beam width: 65 deg.

Azimuth 188.8 degrees

#### New Remote:

Parking garage M for Buildings 6360 and 6330 Sprint Parkway

Structure height: 60 feet

Lat. Long. North 38.915, West -94.661 Transmitter Power 33 dBm (2 watts) Number of Transmitters 2 (2x2 MIMO)

Antenna Gain 17 dBi

Single Tx E.I.R.P. 50 dBm (100 watts)

Total Power for two Tx E.I.R.P. 53 dBm (200 watts Max.)

Antenna center of Radiation varies in testing from 50 feet AGL (rooftop) to 24 feet AGL for Non

Line of sight testing.

Antenna Beam width: 65 deg.

Azimuth 90 degrees

### New Remote:

Parking garage I for Building 6500 Sprint Parkway

Structure height: 60 feet

Lat. Long. North 38.920, West -94.66 Transmitter Power 33 dBm (2 watts) Number of Transmitters 2 (2x2 MIMO)

Antenna Gain 17 dBi

Single Tx E.I.R.P. 50 dBm (100 watts)

Total Power for two Tx E.I.R.P. 53 dBm (200 watts Max.)

Antenna center of Radiation varies in testing from 50 feet AGL (rooftop) to 24 feet AGL for Non

Line of sight testing.

Antenna Beam width: 65 degrees

Azimuth 155 degrees

# Existing authorization with azimuth change only:

Parking garage D for Buildings 6050 and 6000 Sprint Parkway

Structure height: 60 feet

Lat. Long. North 38.919, West -94.655 Transmitter Power 33 dBm (2 watts) Number of Transmitters 2 (2x2 MIMO)

Antenna Gain 17 dBi

Single Tx E.I.R.P. 50 dBm (100 watts)

Total Power for two Tx E.I.R.P. 53 dBm (200 watts Max.)

Antenna center of Radiation varies in testing from 50 feet AGL (rooftop) to 24 feet AGL for Non

Line of sight testing.

Antenna Beam width: 65 degrees

Azimuth 201.3 degrees