



CITY OF EAST GRAND RAPIDS

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FREQUENTLY ASKED QUESTIONS-5G/SMALL CELL/DISTRIBUTED ANTENNA SYSTEMS

WHAT ARE 5G/DISTRIBUTED ANTENNA SYSTEMS/SMALL CELL SYSTEMS?

They are the “fifth generation” of cellular networks. Wireless communication providers note 5G has the potential to provide peak download and upload speeds comparable to fiber connectivity with real-time responsiveness, while connecting a multitude of devices simultaneously. Additionally, 5G is intended to support new technologies such as autonomous vehicles and other use cases that will require near real-time connectivity.

Many 5G networks are created by installing multiple small cells, which complement large cell towers to provide seamless coverage. Small cells are frequently attached to utility poles, light poles, or buildings, and work collectively to create radio access networks (“RAN”) and transmit data via electromagnetic radio waves (radio frequency energy). The cells have a much shorter transmission range than traditional cell towers (typically 500 to 1,000 ft). In contrast to the longer wavelengths associated with older wireless technologies (i.e., 3G and 4G), which allow macro towers to be separated by miles, 5G will rely on shorter millimeter wavelengths that travel only short distances, and therefore require that small cell facilities be placed closer together.

WHY IS 5G/SMALL CELL BEING DEPLOYED?

5G/small cell is being deployed to meet demands of consumers throughout communities in west Michigan, the United States and Globally. The proliferation of consumer demand for connected devices and wireless streaming services for devices like smart phones, smart watches, gaming systems, televisions, security systems, doorbell systems, thermostats, and streaming/cloud-based services, etc. are driving the need for expansion of wireless infrastructure. Where consumer demand is low, it is not likely that service providers will provide infrastructure.

WHAT IS THE CITY’S ROLE IN REGULATING SMALL CELLS?

The City’s regulatory authority is extremely limited and is largely preempted by Federal and State Law. Under the Telecommunication Act of 1996 (“TCA”), Congress tasked the Federal Communications Commission (“FCC”) with creating rules for the implementation of telecommunications consistent with the Act. The FCC regulates interstate and international communications by radio, television, wire, satellite, and cable in all 50 states, the District of Columbia, and U.S. territories. When the FCC promulgates and adopts rules, they become legal requirements that must be followed. The TCA prohibits State and local governments from regulating the placement, construction, and modification of personal wireless services facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the regulations contained within the TCA. Moreover, on or around September 27, 2018, the FCC issued an order captioned Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment, Declaratory Ruling and Third Report and Order, FCC 18-133, WT Docket

No. 17-79, WC Docket No. 17-84 (“Small Cell Order”), which provided further guidance on the deployment of small cell facilities.

The Michigan State Legislature, through PA 365 of 2018, further determined how local units of government in the State of Michigan can regulate small cell facilities. The ability for the City to ban installation of these devices has been eliminated by the State and Federal laws, and the City's ability to regulate them has been minimized by these laws, which have placed a premium on the deployment of small cell technology to the exclusion of other interests. Concerns for safety, health and local control were all raised as part of the public Federal rule making and State legislative process, and as a result FCC Order 18-133 and State of Michigan PA 365 of 2018 have settled these issues. Although the City cannot deny access to the rights-of-way to small wireless facilities in a blanket way (such as through a moratorium), the City does retain the authority to issue permits for the placement of these facilities within the parameters allowed (10 feet from a driveway, sited between property lines, etc.). Among matters that the City cannot regulate under the laws/regulations noted are the radiofrequency (RF) emissions of these wireless facilities, as long as they are in compliance with FCC rules. While there are certainly a variety of different regulations across the country that staff and legal counsel believe are more restrictive in terms of protection of the public right-of-way and health concerns, the City has to be compliant with both FCC Order 18-133 and State of Michigan PA 365 of 2018. Any potential provisions adopted by local governments that are permitted by other states would not be valid and thus the small cell industry would not have to be compliant (install anyway) and could also expose the City to litigation.

The stated purpose of PA 365 of 2018 by the Michigan State Legislature is to do all of the following:

- "Increase investment in wireless networks that will benefit the citizens of the state by providing better access to emergency services, advanced technology, and information."
- "Increase investment in wireless networks that will enhance the competitiveness of the state in the global economy."
- "Encourage the deployment of advanced wireless services by streamlining the process for the permitting, construction, modification, maintenance, and operation of wireless facilities in the public rights-of-way."
- "Allow wireless services providers and wireless infrastructure providers access to the public rights-of-way and the ability to attach to poles and structures in the public rights-of-way to enhance their networks and provide next generation services."
- "Ensure the reasonable and fair control and management of public rights-of-way by governmental authorities within the state."
- "Address the timely design, engineering, permitting, construction, modification, maintenance, and operation of wireless facilities as matters of statewide concern and interest."
- "Provide for the management of public rights-of-way in a safe and reliable manner that does all of the following: supports new technology; avoids interference with right-of-way use by existing public utilities and cable communications providers; allows for a level playing field for competitive communications service providers; and protects public health, safety, and welfare."
- "Increase the connectivity for autonomous and connected vehicles through the deployment of small cell wireless facilities with full access and compatibility for connected and autonomous vehicles as determined and approved by the state transportation department, county road commissions, and authorities."
- "Prioritize, as provided in this act, the use of existing utility poles and wireless support structures for collocation over the installation of new utility poles or wireless support structures."

WHAT IS THE CITY ALLOWED TO REGULATE?

The City is permitted to regulate the following only (from permit checklist/ordinance):

- 1) Wireless unit specifications
 - Utility pole not to exceed 40 feet in height
 - Small cell wireless facility cannot extend 5 feet past the height of utility pole or wireless support structure

- Antenna or Antenna within enclosure cannot exceed 6 cubic feet
- All wireless equipment associated with each facility cannot cumulatively exceed 25 cubic feet in volume
- Equipment on a supporting structure may not exceed an aggregate width of 4 feet (centered on pole)
- Equipment on a supporting structure shall be secured a minimum of 10 feet from the ground surface or 18 feet where equipment may overhang the back of curb line-ground level equipment or shelters are not permitted
- Small cell wireless facilities shall be located no closer than 18 inches from an existing sidewalk/face of curb or 18 inches from a proposed future sidewalk/face of curb location
- Small cell wireless facilities shall be located no closer than 10 feet from any driveway
- Small cell wireless facilities shall be located in line with a side lot line and not in front of a principal building
- Unless otherwise required by the Federal Communications Commission (FCC), the Federal Aviation Administration (FAA), or applicable codes poles shall either maintain a galvanized silver, gray or concrete finish or, subject to any applicable standards of the FAA, FCC or such codes, be painted a neutral color to reduce visual obtrusiveness
- At all pole sites related equipment shall use materials, colors, textures, screening, and landscaping that will blend the facilities to the natural setting and environment to the extent reasonably practical
- All poles shall be of monopole design and construction unless the City approves an alternate design. Disguising or stealthing poles is encouraged

2) Spacing

- City and permittee agree to relocate within 75 feet from proposed location

3) Certification Documentation (PDF and hard copy)

- FCC RF Compliance Certification for each unit/site
- Certificate of Insurance (see full permit for requirements)
- Bond per location (\$1,000 per location)
- If applicable, proof of permissions and easements outside of public ROW
- Facility will not interfere with traffic control or SCADA (sanitary sewer lift stations)
- Facility will not interfere with maintenance or full unobstructed use of public utility infrastructure
- Facility will not interfere with the Americans with Disabilities Act (ADA)

4) Disclosures

- Small cell facilities shall be labeled with the name of the provider, emergency contact telephone number and information that identifies the facility and location by permittee
- Notice to impacted public will be provided by the City to properties within 300 feet of a location where a permit has been issued for collocation, installation, or construction of a small cell facility with contact information provided by the permittee
- A map maintained by the Department of Public Works will be available via the City's website and will include for each location the wireless provider, contact information and FCC RF compliance certification

5) Traffic Control

- If City streets or sidewalk traffic will be impacted, a non-utility ROW permit is required with a traffic and pedestrian plan to be approved by the City

6) After Approval

- Small cell wireless facility must be operational within 1-year of approval
- Restoration of surrounding Right-of-Way within 60 days of completion

IF THE PROVIDER MEETS FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS, WHAT HAPPENS?

If a provider meets all Federal, State and Local laws and regulations, the City must approve a permit for the associated installations. The City cannot deny a permit to a provider if they have met all criteria. The ability for the City to deny or ban installation of these devices has been eliminated by the State and Federal laws, and the City's ability to regulate them has been minimized by these laws, which have placed a premium on the deployment of small cell technology to the exclusion of other interests.

CAN THE CITY SIMPLY REFUSE TO ALLOW SMALL CELL IN THE RIGHT OF WAY?

No. Small cell facilities are allowed in the public right of way per State and Federal law, just like other utilities.

The Telecommunications Act of 1996 provides that local regulations “shall not unreasonably discriminate among providers of functionally equivalent services.” Allowing traditional wireline telephone service providers to install their facilities in the right of way while denying similar access to wireless providers would be contrary to the Act.

The Act also provides that local regulations “shall not prohibit or have the effect of prohibiting the provision of wireless services.” According to the FCC, a local regulation “has the effect of prohibiting” wireless service if it “materially inhibits” the provider’s ability to engage in any of a variety of activities related to its provision of services, including activities designed to fill coverage gaps, densify networks, improve existing services, or introduce new services. Small cell is intended to fulfill each of these objectives. Therefore, an outright ban on small cell within the right of way would violate the Act.

WHERE ARE SMALL CELL/DAS LOCATED?

They are located in public right-of-way, similar to other public and private utilities like electric, natural gas, cable, phone, water, sewer, storm sewer, etc. The City has provided a location map on the small cell/DAS resource page.

WHAT WOULD HAPPEN IF THE CITY DID NOT HAVE AN ORDINANCE?

If the City did not have an Ordinance to regulate what it is permitted to regulate, service providers could locate small cells in the right-of-way at their discretion without adhering to the requirements noted above.

WHO REGULATES THE HEALTH AND SAFETY STANDARDS FOR 5G?

The FCC. To avoid a patchwork of state and local laws governing RF emissions, Congress preempted local communities from regulating the siting of wireless transmitters based on RF concerns if those facilities comply with the FCC's RF standards. 47 U.S.C. §332(c)(7)(B)(iv). Accordingly, the City must rely upon the FCC to ensure that the RF standards provide adequate safeguards for the public health and safety. Currently independent testing in the Grand Rapids area of operating small cell sites demonstrate that RF emissions are between 2-6% of the allowable FCC standards limit.

Under the federal Telecommunications Act, the Federal Communications Commission ("FCC") completely occupies the field with respect to radiofrequency ("RF") emissions regulation. The FCC established comprehensive rules for human exposure to RF emissions (the "FCC Guidelines"). Although the FCC requires all new and modified facilities to demonstrate compliance with the FCC Guidelines prior to construction, the FCC does not require compliance testing at regular intervals thereafter. The FCC requires all applications to include a written statement that the proposed emissions will be compliant, may require that the applicant provide a theoretical model and technical data to support the certification and, in some cases, may require the applicant to perform on-site field tests.

State and local governments cannot regulate wireless facilities based on environmental effects from RF emissions to the extent that the emissions comply with the FCC Guidelines. State and local governments may require applicants to demonstrate compliance with the FCC Guidelines, but they cannot establish compliance requirements that differ from the FCC Guidelines. Accordingly, the City's RF compliance review process is modeled after the FCC's review process—all applicants are required to submit an RF compliance report with technical data to prove that the emissions will be in compliance. The City will conduct independent third-party testing when facilities are installed and publish results on the City small cell/DAS webpage.

Questions regarding potential RF hazards from FCC-regulated transmitters can be directed to the Federal Communications Commission, Consumer & Governmental Affairs Bureau, 445 12th Street, S.W., Washington, D.C. 20554; phone: 1-888-225-5322 (1-888-CALL-FCC); e-mail: rfsafety@fcc.gov. If you have concerns in the future that the facility is not in compliance with the FCC Guidelines, you should report your concerns to the FCC's Enforcement Bureau, 445 12th Street, SW, 3rd floor, Washington, DC 20554; phone: (202) 418-7450.

FCC RF Safety FAQ: <https://www.fcc.gov/engineering-technology/electromagnetic-compatibility-division/radio-frequency-safety/faq/rf-safety>

FDA RF FAQ: <https://www.fda.gov/radiation-emitting-products/home-business-and-entertainment-products/cell-phones>

USDOL RF Information: <https://www.osha.gov/SLTC/radiofrequencyradiation/healtheffects.html>

WHO DO I CONTACT OR APPEAL TO WITH RESPECT TO RF EMISSION CONCERNS WITH RESPECT TO ADA AND FAIR HOUSING ACT ACCOMODATIONS?

With respect to the ADA, the Michigan Legislature in PA 365 of 2018, addressed the issue of locating small cell facilities in the public rights-of-way, noting that applications must not interfere with compliance with the ADA "or similar federal, state, or local standards regarding pedestrian access or movement." MCL 460.1315(2)(i)(iii). RF emissions are beyond the scope of the authority given to the City of East Grand Rapids. Federal law controls this issue, see 47 U.S.C. Sec. 332(c)(7)(B)(iv). This Section provides that: "No state or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service

facilities on the basis of environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions." Any objections should be re-directed to the Federal Communications Commission, which sets the emissions standards, and/or to Congress, which preempted state and local regulation. The City must follow the Federal Statute which specifically prohibits the City from considering RF emissions from small cell antennas unless those emissions exceed the FCC standards.

If you believe that the Americans with Disabilities Act (ADA) and the Fair Housing Act (FHA) apply to your situation, the City of East Grand Rapids is not the party causing your concerns. The City is not installing small cell antennas nor is the City owning or operating small cell antennas. The only role that the City has is issuing permits to telecommunications providers that the City is obligated to issue pursuant to the provisions of Federal law and State law.

CAN THE CITY ESTABLISH LOCAL LIMITS ON RF EMISSIONS OR OTHERWISE REGULATE THE PLACEMENT OF SMALL CELL FACILITIES ON THE BASIS OF THE ENVIRONMENTAL (HEALTH) EFFECTS OF RF EMISSIONS?

No. As was noted above, the FCC has exclusive jurisdiction over the establishment of RF emissions standards for FCC regulated transmitters, including small cell/5G. The Telecommunications Act of 1996 provides that "No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions."

The City can and does, however, require all permit applicants provide certification that each proposed small cell installation complies with FCC emissions standards. The City will conduct independent third-party testing when facilities are installed and publish results on the City small cell/DAS webpage.

City staff recognize that some level of public concern exists over the adequacy of the FCC's existing RF emissions standards as they pertain to small cell and 5G. Those concerns should be addressed to the FCC (see FCC contact information above).

WHAT DOES THE CITY CHARGE FOR 5G SITES?

The State Legislature through PA 365 of 2018 placed caps on limits of what local units of government can charge for fees. Fees are limited to:

- \$20 per Co-Location (Annually)
- \$120 per New Pole (Annually)

HAVE SMALL CELL FACILITIES BEEN DEPLOYED IN EAST GRAND RAPIDS?

Yes. Telecommunications providers have deployed small cell antennas throughout west Michigan, the United States and globally. The City has provided a link on the small cell resources in neighboring communities that are also seeing small cell deployment.

WILL THIS TECHNOLOGY BE DEPLOYED IN RESIDENTIAL AREAS?

Yes. Federal and State law prohibit the City from regulating the placement of small cell facilities through zoning or separation distances.

HOW WILL I BE NOTIFIED OF PERMITS FOR MY NEIGHBORHOOD?

The City cannot require telecommunications companies to provide notifications to residents. Since the City cannot require notifications, the City will provide notification to properties within 300 feet (the same distance as a zoning variance) of a site. Further, the City has a webpage with a map that is updated of current sites and information pertaining to each location via the City website:

<https://www.eastgr.org/529/Small-CellDAS-Permit>

HOW CAN I CHANGE SMALL CELL REGULATIONS?

As has been noted in this document, the City has already put in place regulations to the greatest extent permissible under Federal and State law. To change small cell regulations, citizens should contact Federal and State elected officials who have made the decisions to exclude local control. City staff have experienced a high volume of displeased communications in how 5G/small cell systems are rolled out and desire more input in where and how they are placed. Unfortunately, Federal and State elected officials have limited this. Local government is more accessible than Federal and State government but is not able to act or respond in conflict with Federal and State Laws/Regulations. The City appreciates appropriate communication, patience and understanding.

CAN PROVIDERS REQUEST WAIVERS? HOW DOES THIS WORK?

Section 7.166 of the City Code authorizes the Department of Public Works, through the Director of Public Works, to modify or waive design parameters contained in section 7.165 of the code following an administrative hearing if a waiver request has been filed by an applicant for a permit. The primary reason for the administrative hearing process is due to restrictive decision timeline shot clocks that the State Legislature put into PA 365 and the limited discretion that is permissible. For administrative hearings the City will provide notice of the hearing and accept written public comment (letters and emails) with a prescribed deadline date. The Director of Public Works will review all submitted public comments in advance of the hearing with a provider. Any decisions will be posted on the City website page dedicated to small cell/DAS.

HOW DO I APPEAL APPROVED PERMITS OR WAIVERS?

Permits that have been issued that meet Federal, State and City Ordinance cannot be appealed through the City because all criteria have been met. Administrative waivers that are approved or denied cannot be appealed to the City. Shot clocks that exist in the State law automatically approve applications within very short time frames, which is why legislation permits administrative hearings to consider waivers. Challenges to the laws and regulations can be sought through the appropriate court that has jurisdiction.

I HAVE COME ACROSS VARIOUS REGULATIONS FROM OTHER STATES AND OTHER COUNTRIES, WHY CAN'T SIMILAR RESTRICTIONS BE PUT IN PLACE IN EAST GRAND RAPIDS?

The City of East Grand Rapids must follow Federal Law and State of Michigan Laws. Laws from other states or countries are not applicable.

ADDITIONAL RESOURCES:

FCC Order 18-133:

<https://docs.fcc.gov/public/attachments/FCC-18-133A1.pdf>

State of Michigan PA 365 of 2018:

[http://www.legislature.mi.gov/\(S\(0xk10xkupyw4qobwwtp1drm\)\)/documents/mcl/pdf/mcl-Act-365-of-2018.pdf](http://www.legislature.mi.gov/(S(0xk10xkupyw4qobwwtp1drm))/documents/mcl/pdf/mcl-Act-365-of-2018.pdf)

City of East Grand Rapids Resource/Information Page:

<https://www.eastgr.org/529/Small-CellDAS-Permit>

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