

**ORDINANCE 2019-\_\_**

**AN ORDINANCE OF WESTTOWN TOWNSHIP, CHESTER COUNTY, PENNSYLVANIA, AMENDING CHAPTER 57, "BUILDING CONSTRUCTION," ARTICLE II, "BUILDING CODE," OF THE CODE OF WESTTOWN TOWNSHIP.**

**BE IT ENACTED AND ORDAINED** by the Board of Supervisors of Westtown Township, Chester County, Pennsylvania, that Chapter 57, Building Construction, of the Code of Westtown Township, as amended, be amended as follows:

**SECTION 1.** Chapter 57, "Building Construction," Article II, "Building Code," §57-3, "Adoption of Building Code," is hereby deleted in its entirety and replaced with the following.

**§ 57-3. Adoption of Building Code.**

A certain document, three copies of which are on file in the office of the Secretary of Westtown Township, being marked and designated as the International Building Code, 2006 Edition, including all appendix chapters (see International Building Code Section 101.2.1, 2006 edition), as published by the International Code Council, be and is hereby adopted as the Building Code of Westtown Township, for regulating and governing the conditions and maintenance of all property, buildings and structures, by providing the standards for supplied utilities and facilities and other physical things and conditions essential to ensure that structures are safe, sanitary and fit for occupation and use, and the condemnation of buildings and structures unfit for human occupancy and use and the demolition of such structures as herein provided; providing for the issuance of permits and collection of fees therefor, and each and all of the regulations, provisions, penalties, conditions and terms of said Building Code on file in the office of the Secretary of Westtown Township are hereby referred to, adopted and made a part hereof as if fully set out in this article, including Appendix J - EMERGENCY RESPONDER RADIO COVERAGE, with the additions, insertions, deletions and changes, if any, prescribed in § 57-4 below.

**SECTION 2.** Chapter 57, "Building Construction," Article II, "Building Code," §57-4, "Additions, insertions and changes," is hereby deleted in its entirety and replaced with the following.

**§57-4. Additions, insertions and changes.**

The following sections of the Building Code are revised as follows:

- A. **Section 101.1 Title**, insert: Westtown Township, Chester County, Pennsylvania.
- B. **Section 112 Board of Appeals.** The Township, along with five other municipalities in Chester County, is a member of the West Chester Area Council of Governments (WCACOG) pursuant to an intergovernmental cooperation agreement to create the West Chester Area Council of Governments dated the 1st day of April, 2003. The WCACOG has formed a Board of Appeals for the members in the WCACOG, which Board shall hear and decide appeals of orders, decisions or determinations made by the respective municipalities' building official relative to the application and interpretation of the municipalities' building code and all other related codes that are referenced in Chapter 35 of the IBC 2003. The Board of Appeals shall be appointed by the WCACOG and shall be

governed by rules and regulations adopted by the WCACOG pursuant to the agreement. The Board of Appeals shall adopt rules of procedure for conducting its business.

- C. **Section 113.4 Violation penalties**, delete in its entirety and replace with the following: Any person who violates or permits a violation of this code shall, upon conviction in a summary proceeding brought before a District Justice under the Pennsylvania Rules of Criminal Procedure, be guilty of a summary offense and shall be punishable by a fine of not more than \$1,000, plus costs of prosecution. In default of payment thereof, the defendant may be sentenced to imprisonment for a term not exceeding 90 days. Each day or portion thereof that such violation continues or is permitted to continue shall constitute a separate offense, and each section of this code that is violated shall also constitute a separate offense, subject to the appellate process set forth herein.
- D. **Section 510 EMERGENCY RESPONDER RADIO COVERAGE**, to read as follows:
- 510.1 Emergency responder radio coverage in buildings. All buildings shall have approved radio coverage for emergency responders within the building based upon the existing coverage levels of the public safety communications systems of the jurisdiction at the exterior of the building. This section shall not require improvement of the existing public safety communication systems.
- Exceptions:
1. Where approved by the building official and the fire code official, a wired communication system in accordance with Section 907.2.13.2 shall be permitted to be installed or maintained in lieu of an approved radio coverage system.
  2. Where it is determined by the fire code official and WEGO Police Department Chief of Police that the radio coverage system is not needed.
  3. Any structures in Use Group(s) R3 & S.
  4. Any building constructed of wood frame.
  5. Any building thirty-five (35) feet high or less which does not make use of any metal construction or underground storage or parking areas.
  6. Elevators.
- 510.2 Radio signal strength. The building shall be considered to have acceptable emergency responder radio coverage when signal strength measurements in 95 percent of all areas on each floor of the building meet the signal strength requirements of Section 510.2.1, 510.2.2, 510.2.3, 510.2.4, and 510.2.5.
- 510.2.1 Minimum signal strength into the building. A minimum signal strength of – 95dBm shall be available when transmitted from the closest CCDES radio communications system site.
- 510.2.2 Minimum signal strength out of the building. A minimum signal strength of – 95dBm shall be available when transmitted from the closest CCDES radio communications system site.
- 510.2.3 Frequency range. The frequency range which must be supported shall be between 700MHz and 800MHz.
- 510.2.4 Reliability factor. Adequate radio coverage shall include a 90% reliability factor.
- 510.2.5 Signal strength measurements. Signal strength measurements shall be based on one input signal adequate to obtain a maximum continuous operating output level.
- 510.3 Emergency responder radio coverage in existing buildings. Existing buildings that do not have approved radio coverage for emergency responders within the building, which are non-exempt and for which a building permit application has been sought

which constitutes a change in use or an increase of twenty percent (20%) or more of the total floor area of the building, shall be equipped with such coverage according to one of the following:

1. Wherever existing wired communication system cannot be repaired or is being replaced, or where not approved in accordance with Section 510.1, Exception 1.
2. The provisions of this Section shall become applicable upon notification to the property owner that unacceptable performance levels exist. The property owner shall have ninety (90) consecutive calendar days from the date of notification to submit a professional plan for enhancing radio coverage and an additional ninety consecutive calendar (90) days to achieve compliance with the remaining requirements of this Section. An additional extension may be granted by the Code Officer.

510.4 Amplification systems allowed. Buildings and structures which cannot support the required level of radio coverage shall be equipped with either a radiating cable system or an internal multiple antenna system with or without FCC type accepted bi-directional 700/800 MHz amplifiers as needed. If any part of the installed system or systems contains an electrically powered component, the system shall be capable of operating on an independent battery and/or generator system for a period of at least twelve (12) hours without external power input. The battery system shall charge in the presence of an external power input. If used, bidirectional amplifiers shall include filters to reduce adjacent frequency interference at 35dB below the public safety band. Settings used should not attenuate the rebanded public safety frequencies, and further provided that they are not more than one MHz from these frequencies.

510.5.5 Appeals. If an owner of a building or structure receives written notice from the Township pursuant to Section 113.2, he/she may file an appeal to the West Chester Area Council of Governments Board of Appeals (the "Board of Appeals"). The appeal shall conform to the requirements adopted by the Board of Appeals.

E. **Section 1612.3 Establishment of flood hazard areas**, insert: Westtown Township, Chester County.

F. **Section 3410.2 Applicability**, insert: The date of adoption of this Building Code.

G. **Appendix J – EMERGENCY RESPONDER RADIO COVERAGE**, to read as follows:

#### **SECTION J101 – GENERAL**

J101.1 Scope. Systems, components and equipment required to provide emergency responder radio coverage shall be in accordance with this appendix.

J101.2 Permit. A construction permit is required for installation of or modification to emergency responder radio coverage systems and related equipment. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

#### **SECTION J102 – DEFINITIONS**

J102.1 Definitions. For the purpose of this appendix, certain terms are defined as follows:

AGENCY. Any emergency responder department within the jurisdiction that utilizes radio frequencies for communication. This could include, but not be limited to, various public safety agencies such as fire department, emergency medical services and law enforcement.

APCO. Association of Public Safety Communications Officials International

CCDES. Chester County Department of Emergency Services

FFC. Fame Fire Company

FCC. Federal Communications Commission

FWCFC. First West Chester Fire Company

GFC. Goshen Fire Company

NABER. National Association of Business and Education Radio

NPSPAC. National Public Safety Planning Advisory Committee

PCIA. Personal Communications Industry Association

WEGO PD. Westtown-East Goshen Regional Police Department

(For the purposes of this Section, parking structures and stairwells are included in the definition of “building” and stair shafts are included in the definition of “all parts of a building” but elevators may be excluded if a communication system has already been installed.)

## **SECTION J103 – TECHNICAL REQUIREMENT**

J103.1 System design. The emergency responder radio coverage system shall be designed in accordance with Sections J103.1.1 through J103.1.5.

J103.1.1 Amplification systems allowed. Buildings and structures that cannot support the required level of radio coverage shall be equipped with a radiating cable system, a distributed antenna system with or without Federal Communications Commission (FCC) certified 700/800 MHz signal boosters or other system approved by the AGENCY in order to achieve the required adequate radio coverage.

J103.1.1.1 Buildings and/or structures that have installed a radiating cable system, a distributed antenna system with Federal Communications Commission (FCC) certified signal boosters or other system shall not interfere with the operation of any previously installed device intended to increase emergency responder radio coverage in buildings or the agency’s public safety communications radio system. If used, bidirectional amplifiers shall include filters to reduce adjacent frequency interference at 35dB below the public safety band. Settings used should not attenuate the rebanded public safety frequencies, and further provided that they are not more than one MHz from these frequencies.

J103.1.2 Technical criteria. The AGENCY shall maintain a document providing the specific technical information and requirements for the emergency responder radio coverage system. This document shall contain, but not be limited to, the various frequencies required, the location of radio sites, the effective radiated power of radio sites and other supporting technical information.

J103.1.3 Secondary power. The emergency responder radio coverage system shall be equipped with a secondary source of power. The secondary source of power shall be either a battery system or an emergency generator. The secondary power supply shall supply power automatically when the primary power source is lost. The secondary source of power shall be capable of operating the emergency responder radio coverage system for a period of at least 12 hours.

J103.1.3.1 Battery systems. The active components of the installed system or systems shall be capable of operating on an independent battery system for a period of at least 12 hours without external power input. The battery system shall automatically charge in the presence of external power input.

J103.1.4 Signal booster requirements. If used, signal boosters shall meet the following requirements:

1. All signal booster components shall be contained in a NEMA4-type waterproof cabinet.
2. The battery system shall be contained in a NEMA4-type waterproof cabinet.
3. The system shall include automatic alarming of malfunctions of the signal booster and battery system. Any resulting trouble alarm shall be automatically transmitted to an approved central station or proprietary supervising station as defined in NFPA 72 or, when approved by the AGENCY, shall sound an audible signal at a constantly attended location.
4. Equipment shall have FCC certification prior to installation.

J103.1.5 Additional frequencies and change of frequencies. The emergency responder radio coverage system shall be capable of modification or expansion in the event frequency changes are required by the FCC or additional frequencies are made available by the FCC.

J103.2 Installation requirements. The installation of the public safety radio coverage system shall be in accordance with Sections J103.2.1 through J103.2.5.

J103.2.1 Approval prior to installation. No amplification system capable of operating on frequencies licensed to any public safety agency by the FCC shall be installed without prior coordination and approval of the AGENCY.

J103.2.2 Permit required. A construction permit, as required by Section 105.7.5 of the International Fire Code, shall be obtained prior to the installation of the emergency responder radio coverage system.

J103.2.3 Minimum qualifications of personnel. The minimum qualifications of the system designer and lead installation personnel shall include:

1. A valid FCC-issued General Radio Operators License, and
2. Certification of in-building system training issued by a nationally recognized organization or school or a certificate issued by the manufacturer of the equipment being installed. The AGENCY may waive these requirements upon successful demonstration of adequate skills and experience satisfactory to the AGENCY.

J103.2.4 Acceptance test procedure. When an emergency responder radio coverage system is required, and upon completion of installation, the building owner shall have the radio system tested to ensure that two-way coverage on each floor of the building is a minimum of 90 percent. The test procedure shall be conducted as follows:

1. Each floor of the building shall be divided into a grid of 20 approximately equal areas.
2. The test shall be conducted using a calibrated portable radio of the latest brand and model used by the AGENCY talking through the AGENCY's radio communications system.
3. A maximum of two nonadjacent areas shall be allowed to fail the test.
4. In the event that three of the areas fail the test, in order to be more statistically accurate, the floor may be divided into 40 equal areas. A maximum of four nonadjacent areas shall be allowed to fail the test. If the system fails the 40-area test, the system shall be altered to meet the 90-percent coverage requirement.
5. A test location approximately in the center of each grid area shall be selected for the test, then the radio shall be enabled to verify two-way communications to and from the outside of the building through the public agency's radio communications system. Once the test location has been selected, that location shall represent the entire area. If the test fails in the selected test location, that grid area shall fail, and prospecting for a better spot within the grid area shall not be allowed.
6. The gain values of all amplifiers shall be measured and the test measurement results shall be kept on file with the building owner so that the measurements can be verified during annual tests. In the event that the measurement results become lost, the building owner shall be required to rerun the acceptance test to reestablish the gain values.
7. As part of the installation a spectrum analyzer or other suitable test equipment shall be utilized to insure spurious oscillations are not being generated by the subject signal booster. This test shall be conducted at time of installation and subsequent annual inspections.

J103.2.5 FCC compliance. The emergency responder radio coverage system installation and components shall also comply with all applicable federal regulations, including but not limited to, FCC 47 CFR 90.219.

J103.3 Maintenance. The emergency responder radio coverage system shall be maintained in accordance with Sections J103.3.1 through J103.3.5.

J103.3.1 Maintenance. The public radio coverage system shall be maintained operational at all times.

J103.3.2 Permit required. A construction permit, as required by Section 105.7.5 of the International Fire Code, shall be obtained prior to modification or alteration of the emergency responder radio coverage system.

J103.3.3 Testing and proof of compliance. The emergency responder radio coverage system shall be inspected and tested annually or whenever structural changes occur, including additions or remodels that could materially change the original field performance tests. All tests shall be completed at the expense of the property owner.

Testing shall consist of the following:

1. Signal boosters shall be tested to ensure that the gain is the same as it was upon initial installation and acceptance.
2. Back-up batteries and power supplies shall be tested under load for a period of one hour to verify that they will properly operate during an actual power outage. If within the one-hour test period the battery exhibits symptoms of failure, the test shall be extended for additional one-hour periods until the integrity of the battery can be determined.
3. All other active components shall be checked to verify operation within the manufacturer's specifications.
4. At the conclusion of the testing, a report verifying compliance with section J103.3.3 shall be submitted to the AGENCY.
5. In addition the annual test, the building owner shall perform a radio coverage test a minimum of once every five (5) years to insure that the radio system continues to meet the requirements of the original acceptance test. The procedure set forth above shall apply to such tests.
6. All tests shall be conducted, documented and signed by a person in possession of a current FCC technician license or a current technician certification issued by the APCO, NABER, or PCIA. All test records shall be retained on the inspected premises by the building owner and a copy submitted to the CCDES Technical Division and the CCDES Chief Dispatcher upon inquiry.

J103.3.4 Additional frequencies. The building owner shall modify or expand the emergency responder radio coverage system at his or her expense in the event frequency changes are required by the FCC or additional frequencies are made available by the FCC. Prior approval of a public safety radio coverage system on previous frequencies does not exempt this section.

J103.3.5 Field testing. After reasonable notice to the building owner or his/her representative, AGENCY personnel shall have the right to enter onto the property at any reasonable time to conduct field testing to verify the required level of radio coverage.

**SECTION 3.** If any sentence, clause, section or part of this ordinance is, for any reason, found to be unconstitutional, illegal or invalid, such unconstitutionality, illegality or invalidity shall not affect or impair any of the remaining provisions, sentences, clauses, sections or parts hereof. It is hereby declared as the intent of the Board of Supervisors that this ordinance would have been adopted had such unconstitutional, illegal or invalid sentence, clause, section or part thereof not been included herein.

**SECTION 4.** All ordinances or parts of ordinances conflicting with any provisions of this ordinance are hereby repealed insofar as the same affects this ordinance.

**SECTION 5.** That nothing in this ordinance or in the Property Maintenance Code hereby adopted shall be construed to affect any suit or proceeding impending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or ordinance hereby repealed as cited in Section 4 of this ordinance; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this ordinance.

**SECTION 6.** This amendment shall take effect and be in full force and effect 5 days from and after the date of its final passage and adoption.

ENACTED AND ORDAINED this \_\_\_\_\_ day of \_\_\_\_\_, 2019.

WESTTOWN TOWNSHIP  
BOARD OF SUPERVISORS

ATTEST:

Secretary