

ORDINANCE NO. 2021 - 25

AN ORDINANCE CREATING A NEW ARTICLE 10 (RADIO AMPLIFICATION IN CERTAIN BUILDINGS) IN CHAPTER 18 (BUILDINGS AND BUILDING REGULATIONS) OF THE VILLAGE CODE OF THE VILLAGE OF STICKNEY RELATIVE TO RADIO AMPLIFICATION SYSTEMS IN CERTAIN BUILDINGS.

WHEREAS, the Village of Stickney (the “Village”) is a home rule municipal corporation in accordance with Article VII, Section 6(a) of the Constitution of the State of Illinois of 1970; and

WHEREAS, the Village has the authority to adopt ordinances and to promulgate rules and regulations that pertain to its government and affairs, and to review, interpret and amend its ordinances, rules and regulations; and

WHEREAS, the Village President (the “President”) and the Board of Trustees of the Village (the “Village Board” and with the President, the “Corporate Authorities”) are committed to ensuring the health, safety and welfare of individuals residing in, working in and visiting the Village; and

WHEREAS, the Village is authorized under the Illinois Municipal Code, 65 ILCS 5/1-1-1 *et seq.*, and Illinois law to adopt ordinances pertaining to the public health, safety and welfare; and

WHEREAS, the Corporate Authorities have previously enacted regulations relative to buildings within the Village; and

WHEREAS, the Corporate Authorities desire to add additional regulations to the Village Code requiring buildings, structures or additions constructed after January 1, 2022 to provide adequate radio coverage for public safety agencies; and

WHEREAS, the Corporate Authorities find such amendments to be in the best interests of the Village;

NOW, THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF STICKNEY, COOK COUNTY, ILLINOIS, as follows:

**ARTICLE I.
IN GENERAL**

SECTION 1. INCORPORATION CLAUSE.

The Corporate Authorities hereby find that all of the recitals hereinbefore stated as contained in the preambles to this Ordinance are full, true and correct and do hereby, by reference, incorporate and make them part of this Ordinance as legislative findings.

SECTION 2. PURPOSE.

The purpose of this Ordinance is to amend Chapter 18 to create a new Article 10 of Chapter 18 relating to radio amplification systems in certain buildings and to authorize the President or his designee to take all actions necessary to carry out the intent of this Ordinance.

ARTICLE II.
AMENDMENT OF CHAPTER 18, CREATING TITLE 10
OF THE VILLAGE CODE, VILLAGE OF STICKNEY, ILLINOIS

SECTION 3. AMENDMENT OF CHAPTER 18, ADDITION OF TITLE 10 (NEW SECTION)

That the Village Code is hereby amended, notwithstanding any provision, ordinance, resolution or Village Code section to the contrary, by amending Chapter 18 to add Title 10 by striking out any language to be removed or repealed and underlining and new language as follows:

Secs. 18-338—18-349. – Reserved

Title 10
RADIO AMPLIFICATION IN CERTAIN BUILDINGS

18-350: RADIO COVERAGE:

18-351: RADIO AMPLIFICATION SYSTEM ALLOWED:

18-352: ACCEPTANCE TEST PROCEDURES:

18-353: ANNUAL TEST:

18-354: FIVE YEAR TEST:

18-355: INADEQUATE RADIO COVERAGE:

18-356: QUALIFICATIONS OF TESTING PERSONNEL:

18-357: INSPECTIONS:

18-358: PROPERTY OWNER MAINTENANCE RESPONSIBILITIES:

18-359: EXEMPTIONS:

18-360: PERMIT REQUIRED:

18-361: FAILURE TO COMPLY:

Sec. 18-350: Radio Coverage:

- A. Except as otherwise provided in section 18-359 below, no property owner within the Village shall construct, maintain or modify, or cause to be constructed, maintained or modified, any building, structure, or addition, in a manner which fails to support adequate radio coverage within said building, structure, or addition for the Village's public safety services, including, but not limited to, emergency management, police, fire and public works services. For purposes of this Title, "modify" shall mean substantial changes to, or the addition of, exterior and interior walls using a material that could impact radio coverage, such as brick, cinder block or concrete, or any other structural alteration or change that could impact radio coverage. A certificate of occupancy shall not be issued for any building or structure which fails to comply with this requirement.
- B. The frequency range which must be supported shall be one hundred fifty (150) through one hundred sixty (160) MHzFD, four hundred fifty (450) through four hundred eighty (480) MHzPD, seven hundred forty-six (746) through seven hundred seventy-six (776) MHz, and seven hundred ninety-four (794) through eight hundred six (806) MHz or as otherwise established and required in writing by the Village as being necessary for public safety purposes.

- C. For purposes of this Title, adequate radio coverage shall be defined as a minimum signal level of DAQ3 (Delivered Audio Quality 3) available in ninety-five percent (95%) of the area as agreed to be in the coverage acceptance test plan by the Village and the radio system manufacturer prior to system testing.
- D. All radio coverage systems and components shall comply with all applicable federal regulations including but not limited to FCC 47 CFR Part 90.219.

Sec. 18-351: Radio Amplification System Allowed:

- A. In the event a radio amplification system is necessary to provide adequate coverage, buildings and structures may be equipped with any of the following:
 - 1. A radiating cable system;
 - 2. An internal multiple antenna system with FCC type accepted bidirectional VHF and UHF amplifiers as needed to encompass the frequency range stated in subsection 18-350(B) above or frequency range subsequently established by the Village; or
 - 3. A system that has been approved by the Village as being capable of providing amplification to meet the requirements of this Title.
- B. The radio amplification system shall be capable of operating at 100% capacity 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 automatically charge in the presence of external power input. There shall be no connection between the radio amplification system and the fire alarm system.

Sec. 18-352: Signal Booster Requirements

If used, signal boosters shall meet the following requirements:

- A. All signal booster components shall be contained in a National Electrical Manufacturer's Association (NEMA) 4-type waterproof cabinet.
- B. Battery systems used for the emergency power source shall be contained in a NEMA 3R or higher-rated cabinet.
- C. Equipment shall have FCC or other radio licensing authority certification and be suitable for public safety use prior to installation.
- D. Where a donor antenna exists, isolation shall be maintained between the donor antenna and all inside antennas to not less than 20dB greater than the system gain under all operating conditions.
- E. Bi-Directional Amplifiers (BDAs) used in emergency responder radio coverage systems shall have oscillation prevention circuitry.
- F. The installation of amplification systems or systems that operate on or provide the means to cause interference on any emergency responder radio coverage shall be coordinated and approved by a Village fire code official.

Sec. 18-353: System Monitoring.

The emergency responder radio enhancement system shall be monitored by a listed fire alarm control unit, or where approved by a Village fire code official, shall sound an audible signal at a constantly attended on-sire location. Automatic supervisory signals shall include the following:

- A. Loss of normal AC power supply.
- B. System battery charger(s) failure.
- C. Malfunction of the donor antenna(s).
- D. Low batter capacity at 70% reduction of operating capacity.
- E. Failure of critical system components.
- F. The communications link between the fire alarm system and the emergency responder radio enhancement system.

Sec. 18-354: 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 other radio licensing authority, or additional frequencies are made available by the FCC or other radio licensing authority.

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

Sec. 18-355: Design Documents.

The fire code official shall have the authority to require "as built" design documents and specifications for emergency responder communications coverage systems. The documents shall be in a format acceptable to the fire code official.

Sec. 18-356: Acceptance Test Procedures:

- A. Acceptance testing for an in-building or in-structure radio amplification system is required, upon completion of the installation of the radio amplification system. It is the property owner's responsibility to have the radio amplification system tested to ensure that two-way coverage on each floor of the building is a minimum of DAQ3.
- B. Each floor of the building or structure shall be divided into a grid of approximately forty (40) equal areas. A maximum of two (2) nonadjacent areas will be allowed to fail the test. In the event that three (3) of the areas fail the test, in order to be more statistically accurate, the floor may be divided into eighty (80) equal areas. In such event, a maximum of four (4) nonadjacent areas will be allowed to fail the test. If the radio amplification system continues to fail the test after eight (8) testing attempts, the property owner shall repair, replace, alter or upgrade the radio amplification system to meet the DAQ3 coverage requirement. Talk back testing from the site to the Village's E911 Communications Center shall use a four-watt (4W) UHF portable transceiver with public safety speaker/microphone and flexible antenna attached, and a five-watt (5W) VHF transceiver with speaker/microphone and flexible antenna. A spot located approximately in the center of a grid area will be selected for the test, then the radio

will be keyed to verify two-way communication to and from the outside of the building or structure. Once the spot has been selected, use of another spot within the grid area will not be permitted. Field strength testing instruments are to be recently calibrated (within the past 12 months) and of the frequency selective type incorporating a flexible antenna similar to the ones used on the hand-held transceivers.

- C. The gain values of all amplifiers shall be measured, and the results kept on file with the property owner so that the measurements can be verified each year during the annual tests. In the event that the measurements results become lost, the property owner will be required to rerun the acceptance test to reestablish the gain values.

Sec. 18-357: Annual Test:

When an in-building or structure radio amplification system is installed, the property owner shall, at the owner's sole cost and expense, test all active components of the radio amplification system including, but not limited to, the amplifier, the power supplies and the back-up batteries, a minimum of once every twelve (12) months. Amplifiers shall be tested to ensure that the gain is the same as it was upon initial installation and acceptance of the radio amplification system. Back-up batteries and power supplies shall be tested under load for a period of one (1) hour to verify that they will operate during an actual power outage. All other active components shall be checked to determine that they are operating within the manufacturer's specification for the intended purpose.

Sec. 18-358: Five Year Test:

In addition to the annual test as referred to in section 18-353 above, the property owner shall, at the owner's sole cost and expense, perform a radio coverage test at least once every five (5) years to ensure that the radio amplification system continues to meet the requirements of this chapter. The acceptance test procedures, set forth above in section 18-352 shall apply to such tests.

Sec. 18-359: Field Testing.

Village personnel shall have the right to enter into the property at any reasonable time to conduct field testing to verify the required level of coverage.

Sec. 18-360: Nonpublic Safety System.

Where other nonpublic safety amplification systems installed in buildings reduce the performance or cause interference with the emergency responder communications system, the nonpublic safety amplification system shall be corrected or removed.

Sec. 18-361: Inadequate Radio Coverage:

When a building or structure fails to support adequate radio coverage, the owner of same must present a compliance plan to the Village's Fire Chief within ninety (90) days after the discovery of said failure to address the inadequate radio coverage. The property owner shall, within one (1) year of the approval of the compliance plan, have the approved plan enacted. A one-year extension for the implementation of the compliance plan may be granted by the Fire Chief with an approved phase in plan.

Sec. 18-362: Qualifications Of Testing Personnel:

All tests under sections 18-353 and 18-354 of this Title shall be conducted, documented and signed by a person in possession of a current FCC general radio telephone operator

license. All test records shall be retained at the inspected premises by the property owner, with a copy thereof being submitted to the Village's Fire Chief within (30) days of when the test has been conducted. In the event of the test indicates a failure to comply with the requirements this chapter, appropriate repairs shall be made, and additional tests conducted until said tests indicate that the building or structure meets the requirements of this chapter.

Sec. 18-363: Inspections:

Village personnel, or their agents, after providing reasonable notice to the owner or his/her/their/its representative, shall have the right to enter any building or structure which is subject to the requirements of this chapter to conduct field- testing to be certain that the required level of radio coverage is present.

Sec. 18-364: Property Owner Maintenance Responsibilities:

The property owner shall be responsible for making any repairs, replacements or upgrades to the radio amplification system, as directed by the Village, should the radio amplification system fail to work properly. Once a radio amplification system has been found to be in compliance with the requirements of this Title, the property owner shall be responsible for maintaining said radio amplification system. For each radio amplification system, a copy of the contract shall be provided to the Fire Chief, or their designee, with the name of the contractor who will supply a twenty-four (24) hours per day, seven days per week emergency response within two (2) hours after notification by either the Village or the property owner. The maintenance contract shall contain contact information relative to the contractor including, but not limited to, working phone numbers. The property owner shall also submit contact information for the property owner to the Village, including, but not limited to, phone numbers for the property owner and his/her/their/its representative, if any

Sec. 18-365: Exemptions:

The requirements of this Title shall not apply to:

- A. Single-family residences, regardless of when constructed or modified; or
- B. Buildings where the construction or modifications occurred prior to January 1, 2022.

Sec. 18-366: Permit Required:

A building permit shall be required for the installation of any radio amplification system. The fee for the permit shall be the minimum permit fee as established by the building permit fee schedule set forth in section 18-103 of this code.

Sec. 18-367: Failure To Comply:

Failure to comply with, or a violation of any of the requirements of this Title, shall subject the violator to a fine of not to exceed seven hundred and fifty dollars (\$750.00), with each day a violation continues constituting a separate and distinct offense. In addition to the fine, a violation of any of the requirements of this Title shall be grounds for the Village to revoke any previously issued certificate of occupancy for the building or structure.

SECTION 3.1. OTHER ACTIONS AUTHORIZED.

The officers, employees and/or agents of the Village shall take all action necessary or reasonably required to carry out, give effect to and consummate the amendments contemplated by this

Ordinance and shall take all action necessary in conformity therewith, including, but not limited to, the installation of any street or parking signs as contemplated herein. The officers, employees and/or agents of the Village are specifically authorized and directed to draft and disseminate any and all necessary forms or notices to be utilized in connection with the intent of this Ordinance.

**ARTICLE III.
HEADINGS, SAVINGS CLAUSES, PUBLICATION,
EFFECTIVE DATE**

SECTION 4. HEADINGS.

The headings of the articles, sections, paragraphs and subparagraphs of this Ordinance are inserted solely for the convenience of reference and form no substantive part of this Ordinance nor should they be used in any interpretation or construction of any substantive provision of this Ordinance.

SECTION 5. SEVERABILITY.

The provisions of this Ordinance are hereby declared to be severable and should any provision of this Ordinance be determined to be in conflict with any law, statute or regulation by a court of competent jurisdiction, said provision shall be excluded and deemed inoperative, unenforceable and as though not provided for herein and all other provisions shall remain unaffected, unimpaired, valid and in full force and effect.

SECTION 6. SUPERSEDER.

All code provisions, ordinances, resolutions, rules and orders, or parts thereof, in conflict herewith are, to the extent of such conflict, hereby superseded.

SECTION 7. PUBLICATION.

A full, true and complete copy of this Ordinance shall be published in pamphlet form or in a newspaper published and of general circulation within the Village as provided by the Illinois Municipal Code, as amended.

SECTION 8. EFFECTIVE DATE.

This Ordinance shall be effective and in full force ten (10) days after its passage, approval and publication in accordance with Illinois law.

(REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK)

PASSED this 21st day of December, 2021.

AYES: Trustees White, Savopoulos, Milenkovic, Torres, Kapolnek and Hrejsa

NAYS: None

ABSENT: None

ABSTENTION: None

APPROVED by me this 21st day of December, 2021.

Jeff Walik, President

ATTESTED AND FILED in my
office this 21st day of December, 2021.

Audrey McAdams, Village Clerk