#### **ORDINANCE NO. 2024-027**

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF WOLFFORTH, TEXAS, AMENDING CHAPTER 3, ARTICLE VIELECTRICAL CODE OF THE CODE OF ORDINANCES BY ADOPTING THE 2020 EDITION OF THE NATIONAL ELECTRICAL CODE, PROVIDING A SEVERABILITY CLAUSE; PROVIDING FOR THE REPEAL OF ORDINANCES IN CONFLICT HEREWITH; PROVIDING FOR PUBLICATION; AND PROVIDING FOR AN EFFECTIVE DATE.

# BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF WOLFFORTH, TEXAS, THAT:

## Part 1. Enacted

THAT, Chapter 3, Article VI NATIONAL ELECTRICAL CODE of the Code of Ordinances is hereby amended by amending Sec. 3.06.001, which shall read as follows:

# Sec. 3.06.001 Adopted

The 2020 edition of the National Electrical Code, as copyrighted by the National Fire Protection Association, is hereby adopted by reference as the city electrical code as if fully set out in this article with the additions, deletions, insertions and changes as follows.

# **Amendments:**

- (a) <u>Branch Circuits Required Dwelling Units</u>. Article 210.11(C)(l) is hereby amended to read as follows:
  - (C) Dwelling Units.
    - (I) <u>Small-Appliance Branch Circuits</u>. In addition to the number of branch circuits required by other parts of this section, three or more 20-ampere small-appliance branch circuits shall be provided for all receptacle outlets specified by 210.52(B).
- (b) <u>Arc-Fault Circuit-Interrupter Protection-Dwelling Units</u>. Article 210. I 2(/\) is hereby amended by adding an exception as follows:

Exception: A 20-amp circuit supplying a single (simplex) receptacle outlet for a refrigerator in a kitchen shall not require AFCI protection.

- (c) <u>Commercial Office Space Receptacle Outlets</u>. Article 210 Part III is hereby amended by adding Article 210.51 to read as follows:
- 210.51 Commercial Office Space Receptacle Outlets. Office spaces classified as Group "B"-Business by the Building Code shall be provided with a minimum of four (4) duplex convenience receptacle outlets per office, and/or shall be provided with a duplex convenience outlet for each twelve linear feet of usable wall space, with no point along such wall further than 6 feet from an outlet. Floor outlets further than two feet from a wall shall not be counted towards meeting this requirement. In no case shall more than seven (7) duplex convenience outlets be installed on one 20 amp circuit.

- (d) <u>Dwelling Unit Receptacle Outlets Small Appliances</u>. Article 210.52 (B)(l)- (3) is hereby amended to read as follows:
  - (B) Small Appliances.
    - (1) <u>Receptacle Outlets Served</u>. In the kitchen, pantry, breakfast room, dining room, or similar area of a dwelling unit, the three or more 20-ampere small-appliance branch circuits required by 210.11 (C)(1) shall serve all countertop outlets covered by 210.52(C) only and shall exclude outlet for refrigeration equipment.

Exception No. 1: In addition to the required receptacles specified by 210.52, switched receptacles supplied from a general-purpose 20-ampere branch circuit as required in 210.70(A)(1), Exception No. 1, shall be permitted.

Exception No. 2: In addition to the required receptacles specified by 210.52, a receptacle outlet to serve a specific appliance shall be permitted to be supplied from an individual branch circuit rated 20 amperes or greater.

(2) <u>No Other Outlets</u>. The three or more small-appliance branch circuits specified in 210.52(8)(1) shall have no other outlets.

Exception No. 1: A receptacle installed solely for the electrical supply to and support of an electric clock in any of the rooms specified in 210.52(8)(1).

Exception No. 2: Receptacles installed to provide power for supplemental equipment and lighting on gas-fired ranges, ovens, or counter-mounted cooking units.

- (3) <u>Kitchen Receptacle Requirements</u>. Receptacles installed in a kitchen to serve countertop surfaces shall be supplied by not fewer than three small-appliance branch circuits, either or both of which shall also be permitted to supply receptacle outlets in the same kitchen and in other rooms specified in 210.52(8)(1). Additional small-appliance branch circuits shall be permitted to supply receptacle outlets in the kitchen and other rooms specified in 210.52(8)(1). No small-appliance branch circuit shall serve more than one kitchen.
- (e) Branch Circuit Load Calculations. Article 220.10 is hereby amended to read as follows:
- 220.10 <u>General</u>. Branch-circuit loads shall be calculated as shown in 220.12, 220.14, and 220.16. Additionally, in dwelling units, 20-amp lighting and receptacle loads, other than the three required small appliance circuits specified in 210.11 (C)(1), shall be equally divided on twenty (20)-amp branch circuits.
- (f) Receptacle Outlets. Article 220.14(1) is hereby amended to read as follows:
- (I) Receptacle Outlets. Except as covered in 220.14(J) and (K), receptacle outlets shall be calculated at not less than 180 volt-amperes for each single or for each multiple receptacles on one yoke. A single piece of equipment consisting of a multiple receptacle comprised of four or more receptacles shall be calculated at not less than 90 volt- amperes per receptacle. This provision shall not be applicable to the receptacle outlets specified in 210.11(C)(l) and (C)(2). In no case shall more than seven (7) duplex receptacles be installed on a single 20-amp circuit in commercial occupancies.

- (g) Non-Residential Buildings with multiple services served by underground service laterals. Article 230.2 is hereby amended by adding a new subsection (F), as follows:
- (F) Non-Residential Buildings with multiple services served by underground service laterals. For every non-residential building where multiple services are authorized and are supplied by underground service laterals, there shall be a designated metering/service location at the rear of such building on the exterior wall. There shall be no point along this wall more than seventy-five (75) linear feet from a metering/service location. No utility service point shall be closer than one hundred fifty (150) feet from another utility service point unless otherwise approved. The arrangement and installation of the conductors and equipment shall be as provided for in Article 230.69.
- (h) Point of Attachment. Article 230.26 is hereby amended to read as follows:

#### 230.26 Point of Attachment.

- (A) The point of attachment of the service-drop conductors to a building or other structure shall provide the minimum clearances as specified in 230.9 and 230.24. In no case shall this point of attachment be less than 3.0 m (10 ft.) above finished grade.
- (B) The point of attachment of overhead service drops on a residence or building shall be on the rear of the building (alley side), or at a point agreed upon by the authority having jurisdiction and the serving utility.
- (i) Service Masts as Supports. Article 230.28 is hereby amended to read as follows:
- 230.28 Service Masts as Supports. Only power service-drop or overhead service conductors shall be permitted to be attached to a service mast. Service masts used for the support of service drop or overhead service conductors shall be installed in accordance with the 230.28(A) and (B)
  - (A) <u>Strength</u>. The Service mast shall be adequate strength or be supported by braces or guys to withstand safely the strain imposed by the service-drop or overhead service conductors. Hubs intended for use with conduit that serves as a service mast shall be identified for use with service-entrance equipment. Where raceway-type service masts are utilized, masts shall consist of rigid metallic conduit (RMC) or intermediate metallic conduit (IMC) not less than 2-inch trade size.
  - (B) <u>Attachment</u>. Service-drop or overhead service conductors shall not be attached to a service mast between a weatherhead or the end of the conduit and a coupling, where the coupling is located above the last point of securement to the building or other structure or is located above the building or other structure. The point of attachment of the service cable shall be no less than twenty-four (24) inches above the roof.
- (j) <u>Number of Service-Entrance Conductor Sets</u>. Article 230.40, Exception No. 1, is hereby amended to read as follows:

Exception No. 1: A building with more than one occupancy shall be permitted to have one set of service-entrance conductors for each service, as defined in 230.2, run to each occupancy or group of occupancies. If the number of service disconnect locations for any given classification of service does not exceed six, the requirements of 230.2 (E) and Article 230.69 shall apply at each location. If the number of service disconnect locations exceeds six for any given supply classification, all service disconnect locations for all supply characteristics, together with any branch circuit or feeder supply sources, if applicable, shall be clearly described using suitable

graphics or text, or both, on one or more plagues located in an approved, readily accessible location(s) on the building or structure served as near as practicable to the point(s) of attachment or entry(ies) for each service drop or service lateral and for each set of overhead or underground service conductors.

(k) <u>Service Equipment - General</u>. Article 230 Part V is hereby amended by adding Article 230.68 to read as follows:

#### 230.68 Meter Installation.

- (A) Each meter socket installation shall be on the outside of the building, residence or other structure and shall be mounted not more than six (6) feet nor less than five (5) feet above the level of the standing space measured to the center of the meter face, except when the device or area for mounting the meter base is provided by the serving utility or otherwise approved by the authority having jurisdiction and/or servicing utility.
- (B) Multi-meter bases of two (2) or more meters at any one location shall have a marking of a permanent type to identify the unit and /or space served. Lettering shall no less than one-eight of an inch, clearly visible while facing meter base. Marking shall be done in a manner that does not allow for weather fading and/or accidental damage or removal without extensive work. Stamping is permitted.
- (1) Non-Residential Buildings with multiple services served by underground service laterals. Article 230 Part V is hereby amended by adding a new Article 230.69 to read as follows:
- Article 230.69. Non-Residential Buildings with multiple services served b underground service <u>laterals</u>. Non-Residential Buildings with multiple services served by underground service laterals shall have all services configured in accordance with 230.69 (1) through (6).
  - (1) Taps and service connections, less than 600 amperes. Services rated less than 600A can consist of gutters, wire-way, or wire-trough with a minimum size of ten (10) inch x ten (10) inch x seventy-two (72) inch or as determined by NFPA 70, whichever is greater to contain the service conductors to supply the meter bases and service disconnects at each metering location. Conductors shall be required to traverse the entire length of the wire-way and shall be terminated on an approved termination lug or block. Termination point shall be service rated.
  - (2) Taps and service connections, 600 amperes or greater. Services rated 600 amperes or greater shall have a tap box specifically manufactured with UL listing for the purpose of tapping service conductors at each meter location. It shall possess the full current rating of service and be sized to accommodate bending radius of conductors. Tap box shall be manufactured with correct lug configuration to accommodate the appropriate phases, voltage, conductor size, conductor material, and number of service conductors possible or designed. Enclosure shall be manufactured as suitable for wet location, shall be lockable, and corrosion resistant. In addition to tap box requirements, services rated 600 amperes or greater may consist of gutters, wire-ways, or wire trough with a minimum size of ten (10) inch x ten (10) inch x seventy-two (72) inch or as determined by NFPA70, whichever is greater to contain service conductors to supply the meter bases and service disconnects at each meter location.
  - (3) <u>Conductors and raceways</u>. The contractor shall provide service conductors and raceways from the tap-box, wire-way or wire-trough to the point of connection of the

- serving utility. There shall be one additional four-inch conduit provided from each point of connection of the serving utility or a terminal junction box adjacent to the metering location. The contractor shall provide an acceptable means for at least six (6) meter taps from the service feed brought to each point of service connection.
- (4) Sizing of service entrance conductors and equipment. If the actual load of the building is not known, an assumed load of twenty (20) volt-amperes per square foot shall be used to size the service conductors.
- (5) Phase-matching and balancing of load. All service taps which connect to the building service shall match the phasing of the building service. Service taps connecting to a 3-phase 4-wire building service shall be 3-phase and 4-wire taps. Service taps shall be load balanced before a final inspection is granted and the system shall be balanced back to the building service.
- (6) Method of grounding services. Multi-meter services shall be grounded at the service connection point in the wire way and all service taps shall be grounded to that point. The grounding conductor shall be sized according to the requirements of Article 250 for the service size.
- (m) Grounding Electrode System. Article 250.50 is hereby amended to read as follows:
- 250.50 Grounding Electrode System. All grounding electrodes as described in 250.52(A)(I) through (A)(7) that are present at each building or structure served shall be bonded together to form the grounding electrode system. Where none of these grounding electrodes exist, one or more of the grounding electrodes specified in 250.52 (A)(4) through (A)(8) shall be installed and used. In new construction, or in any building reconstruction or addition involving the new construction of a concrete foundation containing reinforcing steel that complies with the requirements of Article 250.52(A)(3), a concrete encased electrode shall be provided as part of the grounding electrode system. Where a concrete encased electrode or metallic water piping is used, a supplemental electrode complying with 250.52 (A)(5) shall be provided.

Exception: Concrete-encased electrodes of existing buildings or structures shall not be required to be part of the grounding electrode system where the steel reinforcing bars or rods are not accessible for use without disturbing the concrete.

- (n) Minimum Size of Conductors. Article 310.3(A) is hereby amended to read as follows:
- 310.3(A) <u>Minimum Size of Conductors</u>. The minimum size of conductors for voltage rating up to and including 2000 volts shall be 12 AWG copper or I 0 AWG copper-clad aluminum except as permitted elsewhere in NFPA 70 as adopted.

## Exceptions:

- (1) Pendant and portable cords.
- (2) Fixture wire.
- (3) No. 14 AWO copper or 12 AWG copper-clad aluminum may be used for individual fixture leads at an outlet box.
- (4) No. 14 AWG copper or 12 AWG copper-clad aluminum may be used for control circuits operating contactors or relays of a size that cannot exceed the load requirements of the control circuit.

- (5) Wiring for systems covered under Article 700 (Emergency Systems).
- (6) Wiring for systems covered under Article 600 (Electrical Signs).
- (7) No. 14 AWG copper or 12 AWG copper-clad aluminum may be used for the wiring of switch legs in residential occupancies where provided with appropriate over current device and calculated switch leg load docs not exceed 15 amperes.
- (8) Notwithstanding exceptions (1)-(7) above, where permitted elsewhere in NFPA 70 as adopted.
- (o) Conductor Material. Article 310.3(8) is hereby amended to read as follows:
- (B) <u>Conductor Material</u>. Conductors in this article shall be of aluminum, copper-clad aluminum, or copper unless otherwise specified. Solid aluminum conductors 8, 10, and 12 AWG shall be made of a J\A- 8000 series electrical grade aluminum alloy conductor material. Stranded Aluminum conductors 8 AWG through 1000 kcmil marked as Type RFF, RIIW, XHHW, THW, THHW, THWN, THIIM, THI-IN, service-entrance Type SE Style U, and SE Style R shall be made of an AA-8000 series electrical grade aluminum alloy conductor material. Aluminum conductors shall be terminated properly with lugs or termination rated for use with conductor material and installed in accordance with NFPA 70B with proper tools for torque. Such conductors may also be used as branch circuit wiring in commercial and industrial applications in No. 4 AWG or larger wire sizes, subject to further conditions outlined herein.

# Exceptions:

- (1) No aluminum conductors shall be installed on any branch circuits.
- (2) No aluminum conductors shall be installed on any grounding systems.
- (p) <u>Panelboard Overcurrent Device Capacity</u>. Article 408 Part III is hereby amended by adding article 408.35 to read as follows:
- 408.35. Panelboard Spare Circuit Capacity. Panelboards serving dwelling units shall be provided with capacity for two additional 120-volt branch circuits and shall be provided with a spare raceway of not less than 3/4" trade size installed from the panel to an accessible crawl space in the attic, under the floor, or to the outside of the house where there is no accessible attic or crawl space.

# Part 2. Open Meetings Act

This meeting was open to the public as required by law and that public notice of the time, place, and purpose of said meeting was given as required.

## Part 3. Severability Clause

If any section, sub-section, clause, phrase, or portion of this ordinance shall be held unconstitutional or invalid by a court of competent jurisdiction, such section, sub-section, sentence, clause, phrase, or portion shall be deemed to be a separate, distinct and independent provision and such invalidity shall not affect the validity of the remaining portions.

## Part 4. Repeal

*(unapproved draft)* 

All ordinances or parts of ordinances and sections of any of the City Code of Ordinances in conflict with this Ordinance are hereby repealed.

# Part 5. Effect on Pending Proceedings

That nothing in this legislation or in the Electrical Code hereby adopted shall be construed to affect any suit or proceeding pending 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 Part 4 of this Ordinance; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this legislation.

# Part 6. Publication

The City Secretary is authorized and directed to publish the caption and penalty prescribed by this ordinance in accordance with State Law.

# Part 7. Enforcement

Any person, firm or individual who shall violate any of the provisions of this Ordinance shall be guilty of a misdemeanor, and upon conviction shall be fined not less than one dollar (\$1.00) or more than two thousand dollars (\$2,000.00) in accordance with Code of Ordinance Sec. 1.01.009. Each day the violation continues shall constitute a separate and distinct offense.

## Part 8. Effective Date

This Ordinance	shall be in	force and effe	ect from and af	ter October 1	2024

	CITY OF WOLFFORTH
ATTEST:	CHARLES ADDINGTON II, MAYOR
Terri Robinette, City Secretary	<del></del>