

**Ordinance**

Version 3.2 released on 8/3/21

Use for all Ordinances including: TRO, Budget, Zoning, Declarations, Trust Indentures, etc.

**APPROVED**

OCT 26 2022

Tulsa City Council

**CITY COUNCIL USE ONLY**

Date Received: \_\_\_\_\_

Committee Date: 10-19-221<sup>st</sup> Agenda Date: 10-19-22Tracking #: 22-926-1Committee: PW

Hearing Date: \_\_\_\_\_

2<sup>nd</sup> Agenda Date: 10-26-22**CITY CLERK USE ONLY**☐ ScannedDate: 11.02.2022☐ PostedItem #: 2210.02250**All department items requiring Council approval must be submitted through the Mayor's Office.****Primary Details**

|   |   |                                   |  |
|---|---|-----------------------------------|--|
| Dept. Tracking No.  | Board Approval                                | Other Board Name                  | City Council Approval<br><input checked="" type="radio"/> Yes <input type="radio"/> No |
| Department<br>Development Services                              | Contact Name<br>Bob Kolibas                   | Email<br>rkolibas@cityoftulsa.org | Phone<br>918-596-1612  |
| Subject (Description)<br>2020 National Electrical Code Title 52 | Ordinance Type<br>Amending Previous Ordinance |                                   |  |
| Section   | Township                                      | Range                             | Lot  |
| Block   | Address                                       | BA / CT Number                    |  |
| Amending Ord. No.   | TRO Title No.<br>e.g. 43                      | TRO Subtitle<br>e.g. G            | Property/Non-Property  |
| Council District  | Zoning No.                                    | PUD No.                           | Planning District  |

**Budget**

Funding Source(s)

**TOTAL:**

Enter the funding source(s) using the appropriate Muni's funding format: Org (Allocation Code)-Object-Amount (1001211-531401-\$10.00) or Project String-Amount (144104.AbstTitle5413102.6001-4043122-541102-\$30,000.01)

**Approvals**

Department: \_\_\_\_\_

Legal: \_\_\_\_\_

Board: \_\_\_\_\_

Mayor: \_\_\_\_\_

Other: \_\_\_\_\_

*[Signature]* (M. SWINEY)

*[Signature]* Cassia Carr  
Mayor Pro Tem

Date: 10-5-2022

Date: OCT. 4 XXI

Date: OCT 05 2022

Date: \_\_\_\_\_

**Policy Statement****Background Information**

Provide background information on the requested action.

**Summation of the Requested Action**

Updating the National Electrical Code from 2017 to 2020

Summarize the pertinent details of the requested action.

**Emergency Clause?**☒ Yes☐ No**Reason for Emergency Clause**

Explain why you are requesting that the City Council approve this action with an emergency clause.

## Processing Information for City Clerk's Office

### Post Execution Processing

- ☐ Mail vendor copy (add'l signature copies attached)
- ☐ Must be filed with other governmental entity
- ☐ Add'l governmental entity approval(s) required

### Additional Routing and Processing Details

---

(Published in the Tulsa World,

November 6, 2022.)

ORDINANCE NO. 24936

AN ORDINANCE AMENDING TITLE 52 TULSA REVISED ORDINANCES (TRO), "ELECTRICAL CODE"; ADOPTING THE 2020 NATIONAL ELECTRICAL CODE; REPLACING TITLE 52 TRO'S EXISTING CHAPTER 1 WITH A NEW CHAPTER 1, "ADMINISTRATION"; REPLACING TITLE 52 TRO'S EXISTING CHAPTER 2 WITH A NEW CHAPTER 2, "AMENDMENTS TO NATIONAL ELECTRICAL CODE, 2020 EDITION"; ADDING OR DELETING CERTAIN AMENDED SECTIONS, AS PROVIDED HEREIN; REPEALING ALL ORDINANCES OR PARTS OF ORDINANCES IN CONFLICT HERewith; PROVIDING FOR SEVERABILITY; AND DECLARING AN EMERGENCY.

BE IT ORDAINED BY THE CITY OF TULSA:

*Section 1. That Title 52, Tulsa Revised Ordinances, Chapter 1 and 2, be and the same hereby are amended by adopting the 2020 National Electrical Code, to read as follows:*

**"Title 52. ELECTRICAL CODE**

**Chapter 1. Administration**

**Chapter 2. Amendments to National Electrical Code, 2020 Edition**

**CHAPTER 1. - ADMINISTRATION**

**Section 100. Adoption of National Electrical Code, 2020 Edition (NFPA 70-2020)**

A certain document, three (3) copies of which are on file in the Office of the City Clerk of the City of Tulsa, Oklahoma being marked and designated as the National Electrical Code, 2020 Edition (NFPA 70-2020), as published by the National Fire Protection Association (NFPA), is hereby adopted as part of the Tulsa Revised Ordinances, hereinafter the "Electrical Code," for the installation, alteration, repair and regulation of electrical systems and equipment serving buildings and structures except detached one- and two-family dwellings and townhouses not more than three (3) stories above grade plane in height with a separate means of egress and whose accessory structures shall comply with Tulsa Revised Ordinances, Title 51 Chapter 2. Each and all of the terms, conditions, regulations, provisions, and penalties of the National Electrical Code, 2020 Edition (NFPA 70-2020) are hereby referred to, adopted and made a part of the Tulsa Revised Ordinances as if fully set out in this title, with amendments. As used in this title, the National

Electrical Code, 2020 Edition (NFPA 70-2020), as amended by this title, may be referred to as the "code."

## **Section 101. - Applicability.**

**101.1 Existing Structures - Added.** Except as otherwise provided in this title, this code shall not require the removal, alteration or abandonment of, nor prevent continued use of an existing electrical system.

**101.2 Alteration, Additions, or Repairs - Added.** The alteration, addition or repair of any electrical system shall conform to requirements for a new electrical system, without requiring the entire existing system to comply with all of the requirements of this code. Alterations, additions and repairs shall not cause an existing system to become unsafe or adversely affect the performance of the system. Where additions or alterations subject parts of an existing system to loads exceeding those permitted in this code, such parts shall be made to comply with this code.

**101.3 Referenced Standards - Added.** The standards referenced in this code shall be deemed incorporated by reference into this code, to the extent prescribed by each reference. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall apply.

**101.4 Maintenance - Added.** Electrical systems, equipment, materials and appurtenances, both existing and new, and parts thereof shall be maintained in a safe, hazard-free condition. Devices or safeguards that are required by this code shall be maintained in compliance with the code edition under which installed. The owner or the owner's designated agent shall be responsible for the maintenance of the electrical systems and equipment. To determine compliance with this provision, the code official shall have the authority to require that the electrical systems and equipment be re-inspected.

## **Section 102. - Office of electrical inspection.**

**102.1 Authority Having Jurisdiction - Added.** Pursuant to Title 11, Tulsa Revised Ordinances, Chapter 2, the Director of Planning and Development, or the Director's designated representative, as provided by Title 51, Chapter 1, Section 103.2, Tulsa Revised Ordinances, shall direct the administration of the Electrical Code of the City of Tulsa.

**102.2 Conflict of Interest Prohibited - Added.** Electrical Inspectors shall ascribe to and be guided in professional conduct as City of Tulsa representatives, as provided in Title 12, Chapter 6, Tulsa Revised Ordinances, the "Ethics Code".

**102.3 Duties of Code Official - Added.** The code official shall enforce all of the provisions of this code and shall act on any question relative to the installation, alteration and operation of electrical systems and equipment.

**102.4 Authority to Disconnect Service Utilities - Added.** The code official shall have the authority to authorize disconnection of utility services or energy sources to the building, structure or system regulated by this code in case of an emergency where it is necessary to eliminate an immediate hazard to life or property or to abate a violation of this code. The code official shall notify the serving utility and, wherever possible, the owner and occupant of the building,

structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner or occupant of the building, structure or service system shall be notified in writing as soon as practical thereafter. A person shall not make utility service or energy source connections to systems regulated by this code, which have been disconnected or ordered to be discontinued by the code official, or the use of which has been ordered to be discontinued by the code official until the code official authorizes the reconnection and use of such systems.

**102.5 Authority to Condemn Electrical Systems - Added.** Wherever the code official determines that any electrical system, or portion thereof, regulated by this code has become hazardous to life, health or property, the code official shall order in writing that such electrical systems either be removed or restored to a safe condition. A time limit for compliance with such order shall be specified in the written notice. A person shall not use or maintain a defective electrical system or equipment after receiving such notice.

### **Section 103. - Approval.**

**103.1 Approved Materials and Equipment - Added.** All materials, equipment, and devices approved by the code official for use under the administration of this code shall be constructed and installed in accordance with such approval.

**103.2 Alternative Materials and Equipment - Added.** The provisions of this code shall not prevent the installation of any material or prohibit any method of construction not specifically prescribed by this code, provided that the alternative material or method has been approved by the code official. An alternative material or method of construction shall be approved when the code official finds that the proposed design satisfactorily complies with the intent of this code, and that the material, method, or work offered is for the purpose intended. Any and all alternative materials or methods of construction shall be equal to or greater in quality, strength, effectiveness, fire resistance, durability and safety than that prescribed in this code.

**103.3 Labeling - Added.** Electrical materials and equipment regulated by this code shall be listed and labeled by an Occupational Safety and Health Administration (OSHA) Nationally Recognized Testing Laboratory, indicating that they have been tested and evaluated for the intended application by an approved agency, unless they are otherwise approved as provided in this title.

#### **Exception:**

**Unlabeled Equipment - Added.** The following procedures shall be employed for acceptance of any unlabeled equipment:

1. The appliance or equipment shall be investigated and tested by an engineer registered in the State of Oklahoma, who is qualified in the field of the specific appliance or equipment to be tested. The engineer shall not be affiliated in any manner with the manufacturing or distribution of the appliance or equipment.
2. A letter bearing the signature and seal of an engineer registered in the State of Oklahoma shall be furnished to the code official and shall include the following information:

- a. A statement requesting exemption from the labeling requirements set forth in the National Electrical Code.
  - b. A specific description of the appliance or equipment with the model and serial numbers.
  - c. The purpose the appliance or equipment is to serve.
  - d. The type of investigation and test performed. Testing and evaluation shall be in accordance with National Fire Protection Association (NFPA) Standard 791, Recommended Practice and Procedures for Unlabeled Electrical Equipment Evaluations.
  - e. The date and results of the investigation and test performed.
  - f. A statement from the engineer that the equipment is safe for its intended use.
3. The installation of the appliance or equipment shall be approved upon acceptance of the letter by the code official.

**103.5 Construction Documents - Added.** Any construction documents, including plans and specifications that are required by this code or any other adopted code governing construction, shall be provided to the code official upon request.

#### **Section 104. - Permits.**

**104.1 Payment of Fees - Added.** No permit shall be issued until the fees prescribed in Title 49 Tulsa Revised Ordinances have been paid.

**104.2 Permit Required - Added.** No person, firm, partnership, corporation, or limited liability company shall do or cause to be done any electrical work without first having obtained an electrical permit. Electrical permits shall not be transferable.

**Exception.** Where equipment replacements and repairs must be performed in an emergency situation, the permit application shall be submitted within the next working business day.

**104.2.1 Qualification of Permit Applicants - Added.** No electrical permit shall be issued to any person, firm, partnership, corporation, or limited liability company until such person, firm, partnership, corporation or limited liability company has produced evidence of having in their possession the required licenses and registrations.

**104.3 Permit Not Required - Added.** A permit is not required for repairs that do not involve alteration or rearrangement of the electrical installation.

**104.4 Work Started Without a Permit - Added.** If work is initiated prior to the issuance of the required permit, a penalty fee shall be charged in accordance with Title 49, Tulsa Revised Ordinances. The assessment or payment of this fee shall not relieve any person from fully complying with all requirements of this code nor shall such payment exempt the persons from further penalty, such as suspension or revocation of their Certificate of Registration.

**104.5 Expiration of Permit - Added.** Unless extended by the code official, any permit shall be invalid if the authorized work is not commenced within six (6) months after issuance of the

permit, or if the authorized work is suspended or abandoned for a period of six (6) months after the time work commenced.

**104.6 Revocation of Permit - Added.** The code official shall revoke any permit or approval issued pursuant to this code, in the event it is discovered that the permit or approval was issued based upon a false statement or misrepresentation of fact materially affecting the permit application or construction documents.

**104.7 Annual Permits - Added.** Annual permits shall be issued in accordance with Tulsa Revised Ordinances, Title 50.

**104.7.1 Annual Permit - Amendatory.** An annual permit is a yearly permit which represents a group of individual permits for each alteration to an already existing electrical, gas, mechanical or plumbing installation. The building official is authorized to issue an annual permit upon application therefor to any person, firm or corporation regularly employing one or more qualified tradespersons in the building, structure or on the premises owned or operated by the applicant for the permit.

**104.7.2 Annual permit records - Amendatory.** The person to whom an annual permit is issued shall keep a detailed record of alterations made under such annual permit. The building official shall have access to such detailed records of alterations at all times. At the completion of the entity's annual permit term, the applicant shall file such detailed records of alterations with the building official. Pursuant to the authority of 59 O.S. § 1000.25, the building official shall collect fees for each individual permit which is part of the annual permit once the detailed records are submitted and remit such fees to the OUBCC.

## **Section 105. - Inspections.**

**105.1 Inspection Required - Added.** Work shall be subject to inspection by the code official and such work shall remain accessible and exposed until approved. Approval as a result of an inspection shall not be construed as an approval of a violation of this code.

**105.2 Request for Inspection - Added.** It shall be the duty of the permit holder to request inspections.

**105.3 Work Open for Approval - Added.** Work that is covered or concealed without approval of the code official shall be subject to penalty as established by Title 49, Tulsa Revised Ordinances.

**105.4 Exception for Emergencies - Added.** For emergency work outside regular business hours, including weekends and holidays, a utility company may connect electrical service to any electrical installation which the utility company deems to be safe. In such cases, the utility company shall notify the Office of Electrical Inspection no later than the first work day after the electrical connection was made so the installation can be inspected.

**105.5 Final Inspection - Added.** Upon completion of the electrical work, the permit holder shall request a final inspection. If the work complies with the code, the code official shall issue a written notice indicating approval of the work. If the work does not comply with the code, the

code official shall leave written notice identifying the deficiencies. Appropriate corrections and re-inspections shall be made before a final inspection is approved.

**105.6 Other Inspections - Added.** In addition to the inspections specified in this title, the code official is authorized to make or require other inspections to ensure compliance with the provisions of this code and other laws.

**105.7 Downtime and Reconnect Inspections - Added.** The electric utility is authorized to disconnect and reconnect an electrical service on permitted work before an inspection by the code official with the following conditions:

1. The service that is being altered is currently in use.
2. A permit has been issued for the work to be performed.
3. The request shall be made twenty-four (24) hours in advance and cleared with the electric utility provider.
4. The electrical contractor shall contact the City of Tulsa Permit Center and the application shall be forwarded to the electric utility provider.
5. Immediately upon completion of the installation, the electrical contractor shall call for an inspection.
6. The contractor, in advance of the inspection and in coordination with the electric utility provider shall remove all meter, cabinet, and panel covers.
7. Violation of these conditions may result in the electrical contractor being prohibited from requesting Downtime and Reconnect Inspections in the future.

**105.8 Right of Entry - Added.** Where it is necessary to make an inspection to enforce the provisions of this code, or where the code official has reasonable cause to believe that there exists in a structure or upon a premises a condition which is contrary to or in violation of this code which makes the structure or premises unsafe, dangerous or hazardous, the code official is authorized to enter the structure or premises at reasonable times to inspect or to perform the duties imposed by this code, provided that if such structure or premises be occupied that credentials be presented to the occupant and entry requested. If such structure or premises is unoccupied, the code official shall first make a reasonable effort to locate the owner or other person having charge or control of the structure or premises and request entry. If entry is refused, the code official shall have recourse to the remedies provided by law to secure entry.

## **Section 106. - Violations.**

**106.1 Unlawful Acts - Added.** It shall be unlawful, an offense and a misdemeanor for any person, firm, partnership, corporation, or limited liability company to erect, construct, alter, repair, remove, demolish, or operate electrical equipment regulated by this code, or cause same to be done, in conflict with or in violation of any provision of this code.

**106.2 Notice of Violation - Added.** The code official shall serve a notice of violation or order on the person responsible for the erection, installation, alteration, extension, repair, removal, demolition, or operation of electrical equipment or systems in violation of this code. The order shall direct the person responsible to discontinue the illegal action or condition and to abate the



violation. If corrective action is not taken, the code official may file a written complaint in Municipal Court or request the City Attorney to institute the appropriate proceeding in law.

**106.3 Violation Penalties - Added.** Any person violating any of the provisions of this code shall be guilty of a misdemeanor offense and, upon conviction thereof, shall be punished by a fine of not more than One Thousand Two Hundred Dollars (\$1,200.00), excluding costs, fees, and assessments, or by imprisonment in the City Jail for a period not exceeding six (6) months, or by both such fine and imprisonment. Each day that a violation continues after an order or notice has been served shall be deemed a separate offense.

**106.4 Abatement of Violation - Added.** Imposition of criminal penalties prescribed in this title shall not preclude the City Attorney from instituting appropriate action to restrain or enjoin unlawful construction, the illegal occupancy of a building, or to stop an illegal act, conduct, business, or operation of electrical equipment or systems, or to abate any such violation.

#### **Section 107. - Stop work order.**

**107.1 Notice - Added.** Upon notice from the code official that work on any structure is being conducted contrary to the provisions of this code or in an unsafe and dangerous manner, such work shall be immediately stopped. A stop work order shall be in writing and shall be given to the owner of the property involved, or to the owner's agent, or to the person doing the work. The stop work order shall state the conditions under which work will be permitted to resume. Where an emergency exists, the code official shall not be required to give a written notice prior to stopping the work.

**107.2 Unlawful Continuance - Added.** Any person who shall continue any work after having been served with a stop work order, except such work as he is directed to perform to remove a violation or unsafe condition, shall be guilty of a misdemeanor offense as prescribed in Section 106.2 of this title.

**107.3 Unsafe Electrical Systems - Added.** An electrical system that is unsafe, constitutes a fire or health hazard, or is otherwise dangerous to human life, as regulated by this code, is hereby declared an unsafe electrical system. Use of an electrical system regulated by this code constituting a hazard to health, safety or welfare by reason of inadequate maintenance, dilapidation, fire hazard, disaster, damage or abandonment is hereby declared to be a public nuisance, and shall be abated by repair, rehabilitation, demolition or removal.

#### **Section 108. - Means of appeal - Added.**

Appeals of orders, decisions or determinations made by the code official relative to the application and interpretation of this code, shall be made to the Board of Appeals as established by Title 51, Chapter 1, Tulsa Revised Ordinances.

#### **Section 109. - Registration of electrical contractors.**

**109.1 General - Added.** No person, firm, limited liability company, or corporation shall be issued a permit, engage in or offer to engage in, by advertisement or otherwise, any electrical work in the City of Tulsa as a contractor unless such person, firm, limited liability company, or corporation has properly registered with the City of Tulsa. All contractors, journeymen, and

apprentices shall carry their state license on their person at all times while performing electrical work within the City of Tulsa and shall display the same upon request from the code official or a police officer of the City of Tulsa. No person issued a contractor's license shall employ or supervise persons performing electrical work unless those person(s) are licensed or allow any apprentice to perform electrical work unless the apprentice shall have direct supervision by a properly licensed person.

**109.2 Requirements for Registration - Added.** No person, firm, partnership, corporation, or limited liability company shall be issued a Certificate of Registration unless the City shall have been furnished proof of the issuance of a current State of Oklahoma contractor license issued under the provisions of 59 O.S.2001, §§ 1680, et seq., as amended, and the fees established in Title 49, Tulsa Revised Ordinances shall have been paid to the City.

**109.3 Transfer of Registration Prohibited - Added.** No person, firm, partnership, corporation, or limited liability company shall allow its name to be used by any other person, firm, partnership, corporation, or limited liability company to obtain any permit or do any electrical work under its registration.

**109.4 Registration after Revocation - Added.** No person, firm, partnership, corporation, or limited liability company shall be permitted to obtain a new registration within one (1) year from the date of revocation of any prior registration.

**109.5 Expiration of Registration - Added.** Registration of state licensed contractors shall expire on the birth date of the licensee each year.

**109.6 Identification of Service Vehicles - Added.** Every contractor shall identify all service vehicles used in the contractor's business with the company name and contractor's license number. Such letters and numbers shall be no less than two (2) inches in height, shall be of a contrasting color, and shall be placed on both sides of all service vehicles.

**109.7 Suspension or Revocation of Certificates of Registration - Added.** Certificates of Registration may be suspended or revoked by the Board of Appeals in accordance with Title 51, Chapter 1, Tulsa Revised Ordinances.

**Section 110. - Registration fees - Added.** Fees shall be charged for certificates of registration and renewals in accordance with Title 49, Tulsa Revised Ordinances.

## **CHAPTER 2. - AMENDMENTS TO NATIONAL ELECTRICAL CODE, 2020 EDITION**

### **ARTICLE 100: DEFINITIONS - Amendatory**

Article 100 of the National Electrical Code, 2020 Edition (NFPA 70-2020) is adopted as published, provided that the following definitions in Article 100 are added to read as follows:

**Bracketing - Added.** The installation of open wires, supported by metal or wood brackets, along or across the exterior of buildings.

**Nationally Recognized Testing Laboratory - Added.** A testing facility given this designation from the United States Occupational Safety and Health Administration (OSHA) that provides product safety testing and certification services to manufacturers.

**110.12 (B) Integrity of Electrical Equipment and Connections - Amendatory.** Internal parts of electrical equipment, including busbars, wiring terminals, insulators, and other surfaces, shall not be damaged or contaminated by foreign materials such as paint, plaster, cleaners, abrasives, or corrosive residues. There shall be no damaged parts that may adversely affect safe operation or mechanical strength of the equipment such as parts that are broken; bent; cut; or deteriorated by corrosion, chemical action or overheating. Damaged materials, equipment, appliances, and devices shall not be reused unless such elements have been reconditioned, tested, and placed in good and proper working condition and approved by a nationally recognized testing laboratory, or by the manufacturer of the equipment. Electrical equipment damaged by natural or man-made events shall be reused only as recommended by the manufacturer of such equipment.

**210.08 (F) Outdoor Outlets.** All outdoor outlets for dwellings, other than those covered in 210.8 (A) (3), Exception to (3), and for mini-split-type heating/ventilating/air-conditioning (HVAC) equipment and other HVAC units employing power conversion equipment as a means to control compressor speed, that are supplied by single-phase branch circuits rated 150 volts or ground or less, 50 amperes or less, shall have ground-fault circuit-interrupter protection for personnel. Informational Note: Power conversion equipment is the term used to describe the components used in HVAC equipment that is commonly referred to as a variable speed drive. The use of power conversion equipment to control compressor speed differs from multistage compressor speed control. Exception: Ground-fault circuit-interrupter protection shall not be required on lighting outlets other than those covered in 210.8 (C).

**210.12 Arc-Fault Circuit Interrupter Protection. -Added.** Arc-Fault Circuit Interrupter Protection shall be required for existing electrical systems that do not have AFCI protection when any new circuit or receptacle is added to the existing system.

**210.19 (A) (4) Other Loads - Amendatory.** Branch-circuit conductors that supply loads other than those specified in 210.2 and other than cooking appliances as covered in 210.19 (A)(3) shall have an ampacity sufficient for the loads served and shall not be smaller than 14 AWG. 20 ampere general-purpose branch circuits for dwellings shall supply a maximum of 10 outlets, 15 ampere general-purpose branch circuits for dwellings shall supply a maximum of 8 outlets. 20 ampere general-purpose branch circuits for other than dwellings shall supply a maximum of 8 outlets.

**210.22.1 Permanent Labels - Added.** Permanent labels shall be installed to indicate the address or location served by individual meters for multi-occupancy buildings. The permanent labels shall be embossed or engraved plaques, screwed or riveted to the service disconnect.

**215.12.1 Color Coding; Identification of Ungrounded Conductors - Added.** Where more than one nominal voltage system exists in a building, each ungrounded system conductor shall be identified by phase and system as follows:

|         |         |         |       |
|---------|---------|---------|-------|
| 240/120 | 208/120 | 480/277 | Phase |
|---------|---------|---------|-------|

|        |       |              |         |
|--------|-------|--------------|---------|
| Black  | Black | Brown        | A       |
| Orange | Red   | Orange       | B       |
| Blue   | Blue  | Yellow       | C       |
| White  | White | Natural Gray | Neutral |

Other colors shall be used for special applications, such as travelers, etc.

**220.0 Load Calculations - Added.** Where an addition or alteration is made to an existing electrical system, an electrical load calculation shall be prepared to determine if the existing electrical service has the capacity to serve the added load, and the calculation shall be made available to the code official upon request.

**230.24.1 Bracketing Prohibited - Added.** There shall be no bracketing of wires to the exterior of buildings. Weather heads shall be so located that bracketing will not be necessary. This provision shall not apply to wires belonging to public utility companies providing service to existing buildings.

**230.26.1 Point of Attachment for Overhead Services - Added.** The point of the overhead service entrance and attachment to the electric utility company's service wires on a building shall be a minimum of ten (10) feet above the ground.

**Exception:** For existing structures with overhead services, the point of attachment shall be not less than nine (9) feet above the ground. Clearances shall be provided as required by the National Electrical Code.

**230.28.1 Service Masts as Supports - Added.** The minimum size of rigid metal conduit (RMC) shall be two (2) inch for services up to and including two hundred (200) amperes and two and one-half (2-1/2) inches for services over two hundred (200) amperes.

**250.24.1 Ungrounded Systems.** Construction of new ungrounded services shall require the written special permission of the code official.

**250.53 (A)(2) Supplemental Electrode Required. – Added.**

**250.53.1 Residential Remodels and Repairs.** A supplemental grounding electrode shall be required for complete residential rewires and for complete service changes. Repairs to existing services that are not replaced entirely, shall not require a supplemental grounding electrode where 25ohms or less of resistance to earth is present.

**358.12.1 Electrical Metallic Tubing (EMT) Uses Not Permitted - Added.** EMT shall not be installed in concrete or underground.

**422.16(B)(5) Gas-fired central furnaces.** Gas-fired furnaces supplying dwelling units shall be permitted to be connected by a flexible cord-and-plug. The cord and attachment plug shall have

sufficient ampacity for the load and shall be routed or otherwise protected to prevent physical damage to the cord or attachment plug.

**505.7 (A) Implementation of Zone Classification System - Amendatory.** Classification of areas, engineering and design, selection of equipment and wiring methods shall be performed by a Registered Professional Engineer with expertise in Hazardous (Classified) Locations and Zone Systems. The installation of equipment and wiring methods, and inspections shall be performed by qualified persons.

**506.7 (A) Implementation of Zone Classification System - Amendatory.** Classification of areas, engineering and design, selection of equipment and wiring methods shall be performed by a Registered Professional Engineer with expertise in Hazardous (Classified) Locations and Zone Systems. The installation of equipment and wiring methods, and inspections shall be performed by qualified persons.

**555.30 (D) Luminaires and other electrical equipment.** Luminaires and electrical connections to luminaires or other electrical equipment shall be located not less than 5 feet horizontally from the nearest normal edge of the water. If a luminaire is within the 5 foot horizontal zone it must be 12 feet vertically.

**682.10 Electrical Equipment and Transformers.** Electrical equipment and transformers, including their enclosures, shall be specifically approved for the intended location. No portion of an enclosure for electrical equipment not identified for operation while submerged shall be located below the electrical datum plane. Luminaires or other electrical connections shall be located at least 5 feet (1524 mm) horizontally from the nearest edge of the water. If the luminaire is within 5 feet horizontally of the water edge it must be 12 foot vertically above the nearest edge of the water.

**680.23 (A)(4) Voltage Limitations.** No luminaries shall operate above the low voltage contact limit as defined in Section 680.2. This requirement shall apply to new installations, repair, replacement and modification of underwater luminaires. This section shall not apply to relamping if the line-voltage luminaire is protected by a Class A ground-fault circuit-interrupter.

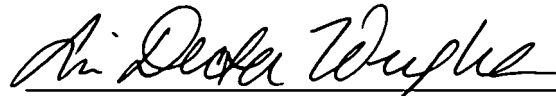
**680.23.1 Underwater Luminaire(s) (Lighting) - Added.** All underwater lighting for swimming, wading, therapeutic, and decorative pools, fountains, hot tubs, and spas shall be supplied with not more than fourteen (14) volts. Where a plastic deck box is used, it shall be installed not less than two (2) feet away from the water's edge. “

*Section 2. REPEAL OF CONFLICTING ORDINANCES. That all ordinances or parts of ordinances in conflict herewith be and the same are now expressly repealed.*

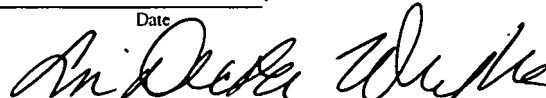
*Section 3. SEVERABILITY CLAUSE. If any section, sentence, clause or phrase of this ordinance or any part thereof is for any reason found to be invalid by a court of competent jurisdiction, such decision shall not affect the validity of the remainder of this ordinance or any part thereof.*

Section 4. *EMERGENCY CLAUSE. That an emergency is now declared to exist for the preservation of the public peace, health and safety, by reason whereof this ordinance shall take effect immediately from and after its passage, approval and publication.*

ADOPTED by the Council: OCT 26 2022  
Date

  
Chair of the Council

ADOPTED as an emergency measure: OCT 26 2022  
Date

  
Chair of the Council

OFFICE OF THE MAYOR

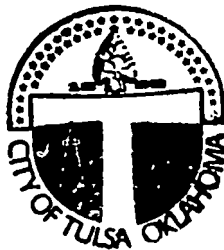
Received by the Mayor: \_\_\_\_\_, at \_\_\_\_\_  
Date Time

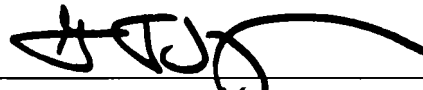
G. T. Bynum, Mayor

By \_\_\_\_\_  
Secretary


APPROVED by the Mayor of the City of Tulsa, Oklahoma: NOV 02 2022  
Date

at \_\_\_\_\_  
Time



  
Mayor

(Seal)  
ATTEST:

  
City Clerk

# TULSA WORLD

P.O. Box 1770 Tulsa, Oklahoma 74102-1770 | [tulsaworld.com](http://tulsaworld.com)

Account Number

1030936

Date

November 06, 2022

CITY OF TULSA  
Attn: City Clerk's Office  
175 E. 2ND ST. SUITE 260  
TULSA, OK 74103

| Date       | Category      | Description | Ad Size       | Total Cost |
|------------|---------------|-------------|---------------|------------|
| 11/06/2022 | Legal Notices | ORD 24936   | 4 x 444.00 CL | 1,136.64   |

## Affidavit of Publication

I, Brenda Brumbaugh, of lawful age, am a legal representative of the Tulsa World of Tulsa, Oklahoma, a daily newspaper of general circulation in Tulsa County, Oklahoma, a legal newspaper qualified to publish legal notices, as defined in 25 O.S. § 106 as amended, and thereafter, and complies with all other requirements of the laws of Oklahoma with reference to legal publication. That said notice, a true copy of which is attached hereto, was published in the regular edition of said newspaper during the period and time of publication and not in a supplement, on the DATE(S) LISTED BELOW

11/06/2022

Newspaper reference: 0000783212

Brenda Brumbaugh  
Legal Representative  
Amber Shell  
Notary Public

Sworn to and subscribed before me this date: 11/7/22

My Commission expires 9/11/23

AMBER SHELL  
NOTARY PUBLIC - STATE OF OKLAHOMA  
MY COMMISSION EXPIRES SEP. 11, 2023  
COMMISSION # 19009197

703211

Published in the Tulsa World, Tulsa County, Oklahoma, November 4, 2022

ORDINANCE NO. 74756

AN ORDINANCE AMENDING TITLE 51, TULSA REVISED ORDINANCES (TRO), "ELECTRICAL CODE"; ADOPTING THE 2020 NATIONAL ELECTRICAL CODE; REPLACING TITLE 51 TRO'S EXISTING CHAPTER 1 WITH A NEW CHAPTER 1, "ADMINISTRATION"; REPLACING TITLE 51 TRO'S EXISTING CHAPTER 2 WITH A NEW CHAPTER 2, "AMENDMENTS TO NATIONAL ELECTRICAL CODE, 2020 EDITION"; ADDING OR DELETING CERTAIN AMENDED SECTIONS, AS PROVIDED HEREIN; REPEALING ALL ORDINANCES OR PARTS OF ORDINANCES IN CONFLICT HERewith; PROVIDING FOR SEVERABILITY; AND DECLARING AN EMERGENCY.

BE IT OBTAINED BY THE CITY OF TULSA:

Section 1. That Title 51, Tulsa Revised Ordinances, Chapter 1 and 2, be and the same hereby are amended by adopting the 2020 National Electrical Code, to read as follows:

# "Title 51. ELECTRICAL CODE

Chapter 1. Administration  
Chapter 2. Amendments to National Electrical Code, 2020 Edition

## CHAPTER 1. ADMINISTRATION

### Section 100. Adoption of National Electrical Code, 2020 Edition (NFPA 70-2020)

A certain document, three (3) copies of which are on file in the Office of the City Clerk of the City of Tulsa, Oklahoma being marked and designated as the National Electrical Code, 2020 Edition (NFPA 70-2020), as published by the National Fire Protection Association (NFPA), is hereby adopted as part of the Tulsa Revised Ordinances, hereinafter the "Electrical Code," for the installation, alteration, repair and replacement of electrical systems and equipment serving buildings and structures except detached one- and two-family dwellings and townhouses not more than three (3) stories above grade plane in height with a separate means of egress and whose accessory structures shall comply with Tulsa Revised Ordinances, Title 51, Chapter 2. Each and all of the terms, conditions, regulations, provisions, and penalties of the National Electrical Code, 2020 Edition (NFPA 70-2020) are hereby referred to, adopted and made a part of the Tulsa Revised Ordinances as if fully set out in this title, with amendments. As used in this title, the National Electrical Code, 2020 Edition (NFPA 70-2020), as amended by this title, may be referred to as the "code."

### Section 101. Applicability.

101.1 Existing Structures - Added. Except as otherwise provided in this title, this code shall not require the removal, alteration or abandonment of, nor prevent continued use of an existing electrical system.

101.2 Alteration, Addition, or Repair - Added. The alteration, addition or repair of any electrical system shall conform to the requirements for a new electrical system, without requiring the entire existing system to comply with all of the requirements of this code. Alteration, addition and repair shall not cause an existing system to become unsafe or adversely affect the performance of the system. Where additions or alterations subject parts of an existing system to loads exceeding those permitted in this code, such parts shall be made to comply with this code.

101.3 Referenced Standards - Added. The standards referenced in this code shall be deemed incorporated by reference into this code, to the extent prescribed by each reference. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall govern.

101.4 Maintenance - Added. Electrical systems, equipment, materials and accessories, both existing and new, and parts thereof shall be maintained in a safe, hazard-free condition. Devices or safeguards that are required by this code shall be maintained in compliance with the code edition under which installed. The owner or the owner's designated agent shall be responsible for the maintenance of the electrical systems and equipment. To determine compliance with this provision, the code official shall have the authority to require that the electrical systems and equipment be re-inspected.

### Section 102. - Office of electrical inspection.

102.1 Authority Having Jurisdiction - Added. Pursuant to Title 51, Tulsa Revised Ordinances, Chapter 2, the Director of Planning and Development, or the Director's designated representative, as provided by Title 51, Chapter 1, Section 103.2, Tulsa Revised Ordinances, shall direct the administration of the Electrical Code of the City of Tulsa.

102.2 Conflict of Interest Prohibited - Added. Electrical inspectors shall subscribe to and be guided in professional conduct as City of Tulsa representatives, as provided in Title 17, Chapter 6, Tulsa Revised Ordinances, the "Ethics Code."

102.3 Duties of Code Official - Added. The code official shall enforce all of the provisions of this code and shall act on any question relative to the installation, alteration and operation of electrical systems and equipment.

102.4 Authority to Disconnect Service Utilities - Added. The code official shall have the authority to authorize disconnection of utility services or energy sources to the building, structure or system regulated by this code in case of an emergency where it is necessary to eliminate an immediate hazard to life or property or to abate a violation of this code. The code official shall notify the serving utility and, wherever possible, the owner and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner or occupant of the building, structure or service system shall be notified in writing as soon as practical thereafter. A person shall not make utility service or energy source connections to systems regulated by this code, which have been disconnected or ordered to be disconnected by the code official, or the use of which has been ordered to be discontinued by the code official until the code official authorizes the reconnection and use of such systems.

102.5 Authority to Remove Electrical Systems - Added. Whenever the code official determines that any electrical system, or portion thereof, regulated by this code has become hazardous to life, health or property, the code official shall order in writing that such electrical systems either be removed or restored to a safe condition. A time limit for compliance with such order shall be specified in the written notice. A person shall not use or maintain a defective electrical system or equipment after receiving such notice.

### Section 103. - Approval.

103.1 Approved Materials and Equipment - Added. All materials, equipment, and devices approved by the code official for use under the administration of this code shall be constructed and installed in accordance with such approval.

103.2 Alternative Materials and Equipment - Added. The provisions of this code shall not prevent the installation of any material or prohibit any method of construction not specifically prescribed by this code, provided that the alternative material or method has been approved by the code official. An alternative material or method of construction shall be approved when the code official finds that the proposed design satisfactorily complies with the intent of this code, and that the material, method, or work offered is for the purpose intended. Any and all alternative materials or methods of construction shall be equal to or greater in quality, strength, effectiveness, fire resistance, durability and safety than that prescribed in this code.

103.3 Labeling - Added. Electrical materials and equipment regulated by this code shall be listed and labeled by an Occupational Safety and Health Administration (OSHA) Nationally Recognized Testing Laboratory, indicating that they have been tested and evaluated for the intended application by an approved agency, unless they are otherwise approved as provided in this title.

### Exception:

Unlabeled Equipment - Added. The following procedures shall be employed for acceptance of any unlabeled equipment:

1. The appliance or equipment shall be investigated and tested by an engineer registered in the State of Oklahoma, who is qualified in the field of the specific appliance or equipment to be tested. The engineer shall not be affiliated in any manner with the manufacturing or distribution of the appliance or equipment.
2. A letter bearing the signature and seal of an engineer registered in the State of Oklahoma shall be furnished to the code official and shall include the following information:

ed by this code, or cause some to be done, in conflict with or in violation of any provision of this code.

104.2 Notice of Violation - Added. The code official shall serve a notice of violation or order on the person responsible for the erection, installation, alteration, extension, repair, removal, demolition, or operation of electrical equipment or systems in violation of this code. The order shall direct the person responsible to discontinue the illegal action or condition and to abate the violation. If corrective action is not taken, the code official may file a written complaint in Municipal Court or request the City Attorney to institute the appropriate proceeding in law.

104.3 Violation Penalties - Added. Any person violating any of the provisions of this code shall be guilty of a misdemeanor or, except upon conviction thereof, shall be punished by a fine of not more than One Thousand Two Hundred Dollars (\$1,200.00), excluding costs, fees, and assessments, or by imprisonment in the City Jail for a period not exceeding six (6) months, or by both such fine and imprisonment. Each day that a violation continues after an order or notice has been served shall be deemed a separate offense.

104.4 Abatement of Violation - Added. Institution of criminal penalties prescribed in this title shall not preclude the City Attorney from instituting appropriate action to restrain or enjoin unlawful construction, the illegal occupancy of a building, or to stop an illegal act, conduct, business, or operation of electrical equipment or systems, or to abate any such violation.

### Section 107. - Stop work order.

107.1 Notice - Added. Upon notice from the code official that work on any structure is being conducted contrary to the provisions of this code or is an unsafe and dangerous manner, such work shall be immediately stopped. A stop work order shall be in writing and shall be given to the owner of the property involved, or to the owner's agent, or to the person doing the work. The stop work order shall state the conditions under which work will be permitted to resume. Where an emergency exists, the code official shall not be required to give a written notice prior to stopping the work.

107.2 Unlawful Continuance - Added. Any person who shall continue any work after having been served with a stop work order, except such work as he is directed to perform to remove a violation or unsafe condition, shall be guilty of a misdemeanor or, except upon conviction thereof, shall be punished as prescribed in Section 104.2 of this title.

107.3 Unsafe Electrical Systems - Added. An electrical system that is unsafe, constitutes a fire or health hazard, or is otherwise dangerous to human life, as regulated by this code, is hereby declared an unsafe electrical system. Use of an electrical system regulated by this code constituting a hazard to health, safety or welfare by reason of inadequate maintenance, deterioration, fire hazard, disaster, damage or abandonment is hereby declared to be a public nuisance, and shall be abated by repair, rehabilitation, demolition or removal.

### Section 108. - Means of appeal - Added.

Appeals of orders, decisions or determinations made by the code official relative to the application and interpretation of this code, shall be made to the Board of Appeals as established by Title 51, Chapter 1, Tulsa Revised Ordinances.

### Section 109. - Registration of electrical contractors.

109.1 General - Added. No person, firm, limited liability company, or corporation shall be issued a permit, engage in or offer to engage in, by advertisement or otherwise, any electrical work in the City of Tulsa as a contractor unless such person, firm, limited liability company, or corporation has properly registered with the City of Tulsa. All contractors, journeymen, and apprentices shall carry their state license on their person at all times while performing electrical work within the City of Tulsa. No person issued a contractor's license shall employ or supervise persons performing electrical work unless those person(s) are licensed or allow any apprentice to perform electrical work unless the apprentice shall have direct supervision by a properly licensed person.

109.2 Requirements for Registration - Added. No person, firm, partnership, corporation, or limited liability company shall be issued a Certificate of Registration unless the City shall have been furnished proof of the issuance of a current State of Oklahoma contractor license issued under the provisions of 99 O.S. 2001, § 1440, et seq., as amended, and the fees established in Title 49, Tulsa Revised Ordinances shall have been paid to the City.

109.3 Transfer of Registration Prohibited - Added. No person, firm, partnership, corporation, or limited liability company shall allow its name to be used by any other person, firm, partnership, corporation, or limited liability company to obtain any permit or do any electrical work under its registration.

109.4 Registration after Revocation - Added. No person, firm, partnership, corporation, or limited liability company shall be permitted to obtain a new registration within one (1) year from the date of revocation of any prior registration.

109.5 Expiration of Registration - Added. Registration of state licensed contractors shall expire on the birth date of the licensee each year.

109.6 Identification of Service Vehicles - Added. Every contractor shall identify all service vehicles used in the contractor's business with the company name and contractor's license number. Such letters and numbers shall be no less than two (2) inches in height, shall be of a contrasting color, and shall be placed on both sides of all service vehicles.

109.7 Suspension or Revocation of Certificates of Registration - Added. Certificates of Registration may be suspended or revoked by the Board of Appeals in accordance with Title 51, Chapter 1, Tulsa Revised Ordinances.

Section 110. - Registration fees - Added. Fees shall be charged for certificates of registration and renewals in accordance with Title 49, Tulsa Revised Ordinances.

## CHAPTER 2. - AMENDMENTS TO NATIONAL ELECTRICAL CODE, 2020 EDITION

### ARTICLE 100: DEFINITIONS - Amended

Article 100 of the National Electrical Code, 2020 Edition (NFPA 70-2020) is adopted as published, provided that the following definitions in Article 100 are added to read as follows:

Brackery - Added. The installation of open wires, supported by metal or wood brackets, along or across the exterior of buildings.

Nationally Recognized Testing Laboratory - Added. A testing facility given this designation from the United States Occupational Safety and Health Administration (OSHA) that provides product safety testing and certification services to manufacturers.

110.12 (B) Integrity of Electrical Equipment and Connections - Amended. Internal parts of electrical equipment, including busbars, wiring terminals, insulators, and other surfaces, shall not be damaged or contaminated by foreign materials such as paint, plaster, cleaners, abrasives, or corrosive residues. There shall be no damaged parts that may adversely affect safe operation or mechanical strength of the equipment such as parts that are broken, bent, cut, or deteriorated by corrosion, chemical action or overloading. Damaged materials, equipment, appliances, and devices shall not be reused unless such elements have been reconditioned, tested, and placed in good and proper working condition and approved by a nationally recognized testing laboratory, or by the manufacturer of the equipment. Electrical equipment damaged by natural or man-made events shall be replaced only as recommended by the manufacturer of such equipment.

110.18 (F) Outdoor Outlets. All outdoor outlets for dwellings, other than those covered in 210.8 (A) (3), Exception, 110.13, and for mini-split type heating/ventilating/cooling (HVAC) equipment and other HVAC units employing power conversion equipment as a means to control compressor speed, that are supplied by single-phase branch circuits rated 150 volts or ground equipment as a means to control compressor speed, that are supplied by single-phase branch circuits rated 150 volts or ground equipment as a means to control compressor speed, shall have ground-fault circuit-interrupter protection for personnel. Informational Note: Power conversion equipment is the term used to describe the components used in HVAC equipment that is commonly referred to as a variable speed drive. The use of power conversion equipment to control compressor speed differs from multistage compressor speed control. Exception. Ground-fault circuit-interrupter protection shall not be required on lighting outlets other than those covered in 210.8 (C).

110.12 Arc-Fault Circuit Interrupter Protection. Added. Arc-Fault Circuit Interrupter Protection shall be required for existing electrical systems that do not have AFCI protection when any new circuit or receptacle is added to the existing system.

110.19 (A) (4) Other Loads - Amended. Branch-circuit conductors that supply loads other than those specified in 210.2 and other than cooking appliances as covered in 210.19 (A) (3) shall have an ampacity sufficient for the loads served and shall not be smaller than 14 AWG. 20 ampere general-purpose branch circuits for dwellings shall satisfy a minimum of 20 ampacity.



- a. A statement requesting exemption from the labeling requirements set forth in the National Electrical Code.
- b. A specific description of the appliance or equipment with the model and serial numbers.
- c. The purpose the appliance or equipment is to serve.
- d. The type of investigation and test performed. Testing and evaluation shall be in accordance with National Fire Protection Association (NFPA) Standard 771, Recommended Practice and Procedures for Unlabeled Electrical Equipment Evaluations.
- e. The date and results of the investigation and test performed.
- f. A statement from the engineer that the equipment is safe for its intended use.

3. The installation of the appliance or equipment shall be observed upon acceptance of the letter by the code official.

103.3 Construction Documents - Added. Any construction documents, including plans and specifications that are required by this code or any other adopted code governing construction, shall be provided to the code official upon request.

#### Section 104. - Permits.

104.1 Payment of Fees - Added. No permit shall be issued until the fees prescribed in Title 49 Tulsa Revised Ordinances have been paid.

104.2 Permit Required - Added. No person, firm, partnership, corporation, or limited liability company shall do or cause to be done any electrical work without first having obtained an electrical permit. Electrical permits shall not be transferable.

Exception: Where equipment replacements and repairs must be performed in an emergency situation, the permit application shall be submitted within the next working business day.

104.2.1 Classification of Permit Applicants - Added. No electrical permit shall be issued to any person, firm, partnership, corporation, or limited liability company until such person, firm, partnership, corporation or limited liability company has produced evidence of having in their possession the required licenses and registrations.

104.3 Permit Not Required - Added. A permit is not required for repairs that do not involve alteration or rearrangement of the electrical installation.

104.4 Work Started Without a Permit - Added. If work is initiated prior to the issuance of the required permit, a penalty fee shall be charged in accordance with Title 49, Tulsa Revised Ordinances. The assessment or payment of this fee shall not relieve any person from fully complying with all requirements of this code nor shall such payment exempt the persons from further penalty, such as suspension or revocation of their Certificate of Registration.

104.5 Expiration of Permit - Added. Unless extended by the code official, any permit shall be invalid if the authorized work is not commenced within six (6) months after issuance of the permit, or if the authorized work is suspended or abandoned for a period of six (6) months after the time work commenced.

104.6 Revocation of Permit - Added. The code official shall revoke any permit or renewal issued pursuant to this code, in the event it is discovered that the permit or renewal was issued based upon a false statement or misrepresentation of fact materially affecting the permit application or construction documents.

104.7 Annual Permits - Added. Annual permits shall be issued in accordance with Tulsa Revised Ordinances, Title 50.

104.7.1 Annual Permit - Amendment. An annual permit is a yearly permit which represents a group of individual permits for each alteration to an already existing electrical, gas, mechanical or plumbing installation. The building official is authorized to issue an annual permit upon application therefor to any person, firm or corporation regularly employing one or more qualified tradespersons in the building, structure or on the premises owned or operated by the applicant for the permit.

104.7.2 Annual permit records - Amendment. The person to whom an annual permit is issued shall keep a detailed record of alterations made under such annual permit. The building official shall have access to such detailed records of alterations at all times. At the completion of the annual permit term, the applicant shall file such detailed records of alterations with the building official. Pursuant to the authority of 39 U.S.C. § 1020.25, the building official shall collect fees for each individual permit which is part of the annual permit once the detailed records are submitted and remit such fees to the OUBCC.

#### Section 105. - Inspections.

105.1 Inspection Required - Added. Work shall be subject to inspection by the code official and such work shall remain accessible and exposed until approved. Approval as a result of an inspection shall not be construed as an approval of a violation of this code.

105.2 Request for Inspection - Added. It shall be the duty of the permit holder to request inspections.

105.3 Work Open for Approval - Added. Work that is covered or concealed without approval of the code official shall be subject to penalty as established by Title 49, Tulsa Revised Ordinances.

105.4 Exception for Emergencies - Added. For emergency work outside regular business hours, including weekends and holidays, a utility company may connect electrical service to any electrical installation which the utility company deems to be safe. In such cases, the utility company shall notify the Office of Electrical Inspection no later than the first work day after the electrical connection was made so the installation can be inspected.

105.5 Final Inspection - Added. Upon completion of the electrical work, the permit holder shall request a final inspection. If the work complies with the code, the code official shall issue a written notice indicating approval of the work. If the work does not comply with the code, the code official shall leave written notice identifying the deficiencies. Appropriate corrections and re-inspections shall be made before a final inspection is approved.

105.6 Other Inspections - Added. In addition to the inspections specified in this title, the code official is authorized to make or require other inspections to ensure compliance with the provisions of this code and other laws.

105.7 Downtime and Reconnect Inspections - Added. The electric utility is authorized to disconnect and reconnect on electrical service on permit work before on inspection by the code official with the following conditions:

1. The service that is being altered is currently in use.
2. A permit has been issued for the work to be performed.
3. The request shall be made twenty-four (24) hours in advance and cleared with the electric utility provider.
4. The electrical contractor shall contact the City of Tulsa Permit Center and the application shall be forwarded to the electric utility provider.
5. Immediately upon completion of the installation, the electrical contractor shall call for an inspection.
6. The contractor, in advance of the inspection and in coordination with the electric utility provider shall remove all meter, cabinet, and panel covers.
7. Violation of these conditions may result in the electrical contractor being prohibited from requesting Downtime and Reconnect Inspections in the future.

105.8 Right of Entry - Added. Where it is necessary to make an inspection to enforce the provisions of this code, or where the code official has reasonable cause to believe that there exists in a structure or upon a premises a condition which is contrary to or in violation of this code which makes the structure or premises unsafe, dangerous or hazardous, the code official is authorized to enter the structure or premises at reasonable times to inspect or to perform the duties imposed by this code, provided that if such structure or premises are occupied that credentials be presented to the account and entry requested, if such structure or premises are unoccupied, the code official shall first make a reasonable effort to locate the owner or other person having charge or control of the structure or premises and request entry. If entry is refused, the code official shall have recourse to the remedies provided by law to secure entry.

#### Section 106. - Violations.

106.1 Unlawful Acts - Added. It shall be unlawful, an offense and a misdemeanor for any person, firm, partnership, corporation, or limited liability company to erect, construct, alter, repair, remove, demolish, or operate electrical equipment regulated

by this code unless such person, firm, partnership, corporation or limited liability company is duly licensed or registered as an electrician or other person authorized to do such work.

118.22.1 Permanent Labels - Added. Permanent labels shall be installed to indicate the address or location served by individual meters for multi-occupancy buildings. The permanent labels shall be embossed or enameled plaques, screwed or riveted to the service disconnect.

215.1.2.1 Color Coding - Identification of Ungrounded Conductors - Added. Where more than one nominal voltage system exists in a building, each ungrounded system conductor shall be identified by phase and system as follows:

|         |         |              |         |
|---------|---------|--------------|---------|
| 240/120 | 208/120 | 480/277      | Phase   |
| Black   | Black   | Brown        | A       |
| Orange  | Red     | Orange       | B       |
| Blue    | Blue    | Yellow       | C       |
| White   | White   | Natural Gray | Neutral |

Other colors shall be used for special applications, such as travelers, etc.

228.4 Load Calculations - Added. Where an addition or alteration is made to an existing electrical system, an electrical load calculation shall be prepared to determine if the existing electrical service has the capacity to serve the added load, and the calculation shall be made available to the code official upon request.

238.34.1 Bracketing Prohibited - Added. There shall be no bracketing of wires to the exterior of buildings. Weather heads shall be installed and the wires shall be made available to the code official upon request.

238.34.1 Point of Attachment for Overhead Services - Added. The point of the overhead service entrance and attachment to the electric utility company's service wires on a building shall be a minimum of ten (10) feet above the ground.

Exception: For existing structures with overhead services, the point of attachment shall be not less than nine (9) feet above the ground. Clearances shall be provided as required by the National Electrical Code.

238.34.1 Service Masts or Supports - Added. The minimum size of rigid metal conduit (RMC) shall be two (2) inch for services up to and including two hundred (200) amperes and two and one-half (2-1/2) inches for services over two hundred (200) amperes.

238.34.1 Ungrounded Systems. Construction of new ungrounded services shall require the written special permission of the code official.

238.35 (A)(1) Supplemental Electrode Required - Added.

238.35.1 Residential Rerouted and Replaced. A supplemental grounding electrode shall be required for complete residential reroutes and for complete service changes. Reroutes to existing services that are not replaced entirely, shall not require a supplemental grounding electrode where 5 ohms or less of resistance to earth is present.

238.1.1 Electrical Metallic Tubing (EMT) Uses Not Permitted - Added. EMT shall not be installed in concrete or underground.

422.14(B)(13) Gas-fired central furnaces, Gas-fired furnaces supplying dwelling units shall be permitted to be connected by a flexible cord-and-plug. The cord and attachment plug shall have sufficient ampacity for the load and shall be routed or otherwise protected to prevent physical damage to the cord or attachment plug.

580.7 (A) Implementation of Zone Classification System - Amendment. Classification of areas, engineering and design, selection of equipment and wiring methods shall be performed by a Registered Professional Engineer with expertise in Hazardous (Classified) Locations and Zone Systems. The installation of equipment and wiring methods, and inspections shall be performed by qualified persons.

580.7 (A) Implementation of Zone Classification System - Amendment. Classification of areas, engineering and design, selection of equipment and wiring methods shall be performed by a Registered Professional Engineer with expertise in Hazardous (Classified) Locations and Zone Systems. The installation of equipment and wiring methods, and inspections shall be performed by qualified persons.

553.36 (2) Luminaires and other electrical equipment. Luminaires and electrical connections to luminaires or other electrical equipment shall be located not less than 3 feet horizontally from the nearest normal edge of the water. If a luminaire is within the 3 foot horizontal zone it must be 12 feet vertically.

602.10 Electrical Equipment and Transformers. Electrical equipment and transformers, including their enclosures, shall be specifically approved for the intended location. No portion of an enclosure for electrical equipment not identified for operation while submerged shall be located below the electrical datum plane. Luminaires or other electrical connections shall be located at least 3 feet (1324 mm) horizontally from the nearest edge of the water. If the luminaire is within 3 feet horizontally of the water edge it must be 12 feet vertically above the nearest edge of the water.

680.22 (A)(4) Voltage Limitations. No luminaires shall operate above the low voltage contact limit as defined in Section 400.2. This requirement shall apply to new installations, repair, replacement and modification of underwater luminaires. This section shall not apply to maintenance if the live-wire luminaire is serviced by a Class A ground-fault circuit-interrupter.

680.22.1 Underwater Luminaires (Lighting) - Added. All underwater lighting for swimming, wading, therapeutic, and decorative pools, fountains, hot tubs, and spas shall be supplied with not more than fourteen (14) volts. Where a plastic deck base is used, it shall be installed not less than two (2) feet away from the water's edge.

Section 2. REPEAL OF CONFLICTING ORDINANCES. That all ordinances or parts of ordinances in conflict herewith be and the same are now expressly repealed.

Section 3. SEVERABILITY CLAUSE. If any section, sentence, clause or phrase of this ordinance or any part thereof is for any reason found to be invalid by a court of competent jurisdiction, such decision shall not affect the validity of the remainder of this ordinance or any part thereof.

Section 4. EMERGENCY CLAUSE. That an emergency is now declared to exist for the preservation of the public peace, health and safety, by reason whereof this ordinance shall take effect immediately from and after its passage, approval and publication.

ADOPTED by the Tulsa City Council, this 26th Day of October 2022

ADOPTED as an emergency measure, this 26th Day of October 2022

Lori Decker Wright, Chair of the City Council

APPROVED by the Mayor of the City of Tulsa, Oklahoma, this 2nd Day of November 2022

G. T. Bynum, Mayor

ATTEST: Christina Chenevix, City Clerk

APPROVED: Jack Blair, City Attorney

