Recommended Amendments to the 2020 National Electrical Code

ARTICLE V. - ELECTRICAL CODE

DIVISION 1. - GENERAL

Sec. 5-156. - Short title.

The title of this article shall be "The Hurst Electrical Code," and it may be cited as such.

For the purposes of this chapter certain terms, phrases, words and their derivatives shall be construed as set out in this section. Words used in any regulation or standard of the American Insurance Association used as a standard of good practice shall, if defined therein, have the meanings assigned them. Words relating to buildings and building use, when not otherwise separately defined, shall have meanings which conform to the ones set out in the building code, residential code, National Electrical Code, this article, ordinances, and zoning ordinance of the city; otherwise, they shall have their usual meanings. Approved shall mean equipment and/or devices inspected, tested and listed by a nationally recognized testing agency, such as Underwriters' Laboratories, Inc. Authorized person shall mean any individual, firm or corporation who or which is licensed under the provisions of this article to do the work as permitted under the specific provisions of this article. City shall mean the territory within the corporate limits of the City of Hurst, or the legally constituted governing body thereof, its agents, inspectors, and its officers. Conductor shall mean a wire, cable or other form or metal suitable for carrying electric current or potential.

Sec. 5-157. - Definitions

City shall mean City of Hurst.

Code official means the officer, inspector, agent, or other designated person or authority, charged with the administration and enforcement of this code, or a duly appointed authorized representative of or by the City of Hurst.

Electrical construction or work shall mean and include all work and materials used in installing, maintaining, repairing, altering, replacing, removing, or extending an electrical system or electrical wiring and all appurtenances, apparatus or equipment used in connection therewith, inside of or attached to any building, structure, or on any lot or premises. Electrical contractor shall mean any person engaged in the business of installing, repairing, maintaining, removing, extending, or altering, electrical conductors or equipment or appurtenances, or apparatuses in connection therewith. Such term shall include any person, whether actually doing electrical work or not, and any person who subcontracts to do such work, but it shall not include unlicensed or non-bona fide employees employed by a contractor to do or supervise such work.

Electrician shall mean a person who is engaged in the trade or business of electrical construction and who is licensed to do such work under the terms and provisions of this article. Persons engaged in the manufacture, fabrication or assembly of products, equipment or devices wherein electrical wiring, apparatus, or other devices or equipment is installed, incorporated or otherwise attached or used are specifically exempt from this article.

Equipment shall mean electrical conductors, material, fittings, devices, appliances, fixtures, apparatus, motors, wires, machinery and the like used as a part of or in connection with an electrical installation.

Identification shall mean a valid state issued identification or identification approved by the Building Official.

Inspector shall mean an individual employed to inspect and enforce the provisions of this article and the National Electrical Code.

Licensed shall mean a qualified electrician registered and approved to do electrical work with, though, or in the State of Texas.

Person shall mean a natural person, heirs, executors, administrators or assigns of person, and also includes a firm, partnership or corporation, or and of the like, and its or their successors or assigns, or the agent of any of the above.

Registered, when used with the words "electrical contractor," "electrician" or of the like, shall mean that the person has made application to the building inspections department and has provided the required identification, and has paid the necessary fees to date.

Special permission shall mean a written ruling filed in the office of the building official.

Sec. 5-158. - Penalties.

Any person violating any of the provisions of this article shall be deemed guilty of a misdemeanor and may be cited and / or assessed fees.

Sec. 5-159. - Purpose.

The purpose of this article is the practical safeguarding of persons and of buildings and their contents and premises from electrical hazards arising from the use or potential use of electricity for light, heat, power, radio, signaling and for other purposes.

Sec. 5-160. - Applicability.

Generally. The provisions of this article shall apply to all electrical construction done on electrical conductors, fittings, devices, motors, appliances, fixtures, signs and gaseous tubing, referred to as "electrical equipment," throughout this article, within or on public and private buildings and premises, except as otherwise provided in this section.

Public utilities. The provisions of this article shall not apply to installations used by electricity supply or communication agencies in the generation, transmission or distribution of electricity, or for signals or the transmission of intelligence when located within or on buildings or premises used exclusively by such an agency or on public thoroughfares; provided, however, that such agencies excepted are operating under a franchise agreement within the city.

Federal buildings. This article shall be construed to be inapplicable to any building which is owned and operated by the United States government.

City departments, premises, and buildings. The various departments and buildings of the city shall be subject to the provisions of this article insofar as the same may be applicable, but shall be exempt from the requirement of fees.

Electric signs, gaseous tubing, etc. This article shall apply to all forms of electrical signs, gaseous tubing(s) and outline lighting conductors and equipment.

Sec. 5-161. - General standards; code adopted.

All electrical equipment or conductors worked on, installed or used within the city shall be reasonably safe to persons or property as determined by the code official in conformity with the standards provided by the National Fire Protection Association with the provisions of this article, applicable state statues and any rules or regulations issued under authority thereof.

NFPA 70, The National Electrical Code, 2020 Edition, as published by the National Fire Protection Association, as amended by <u>section 5-168</u>, and this article, a copy of which is on file in the office of the city secretary, is hereby adopted by reference and designated as the electrical code of the City of Hurst as though such code were copied at length in this article.

All work on electrical conductors or equipment hereafter made and all existing installations which are altered, shall be done in a manner that will conform with the requirements for a sufficient and safe electrical system in conformity with this article. Repair and maintenance work shall be such that, if any electrical conductors are removed and later replaced, they shall be replaced in a manner which conforms with this article.

Sec. 5-162. - Regulations of electrical provider company adopted.

Rules and regulations of the electrical provider company relating to service and meter installations for the kind of service to be rendered, as passed and approved by the city council from time to time, are incorporated and made a part of this article. The company shall be required to furnish written notice of any changes in rules and regulations or additions thereto to each registered electrical contractor and to the city.

Sec. 5-163. - Supervision of work.

In the actual work of installing, maintaining, altering, removing, extending, or repairing any electrical conductors or equipment for which a permit is required by this article, there shall be present and in direct supervision a licensed electrician. Should it come to the notice of the code official that such supervision and control is not being maintained, the code official may order the work discontinued and the person to whom the permit has been issued shall discontinue further work until proper supervision has been employed or supplied. Nothing prohibits the code official from requiring unsupervised work from being removed. Nothing in this section shall be construed as prohibiting the employment of apprentices or unskilled laborers assisting a duly licensed person under the provisions of this article.

Sec. 5-164. - Service and meter connections.

Only authorized employees of the electrical provider company shall be permitted to make the connection between its service conductors and the customer's service entrance conductors.

When new electrical meters are installed or existing electrical meters are to be relocated, the disconnection, connection, or reconnection to the meter shall be made only by authorized employees of the electrical provider company after all required inspections have been completed and approved by the code official.

Sec. 5-165. - Alteration of conductors or equipment.

It shall be unlawful for any person to in any manner change or alter electrical conductors or equipment in or on any building or premises. If, in the course of the erection of a building or structure, electrical conductors or equipment are in such position as to interfere with the erection or completion of the structure, notice shall be given to the person performing the work or person responsible for the work of the electrical conductors or equipment, and the needed change shall be made by such person.

Sec. 5-166. - Installations; conformance to specifications.

The installation of electrical equipment, within or attached to buildings or structures, shall be done in accordance with specifications previously submitted to and approved by the City of Hurst's Building Inspection Department. Complete descriptions of proposed work may be required by the city or code

official. When drawings are requested they shall be to a definite scale, showing the point at which service connection is required, the size of the service and sub feeders, the location of service switches and center of distribution, the arrangement of circuits and the number of outlets connected thereto.

Sec. 5-167. - Reserved.

Sec. 5-168. - Amendments, deletions and changes to the electrical code.

Add 90.4.1 to read as follows:

90.4.1. Notice of violation. The code official is authorized to serve a notice of violation or order to the person responsible for the erection, installation, alteration, extension, repair, removal or demolition of any work regulated by this code or article that is in violation of the provisions of this code, article, or in violation of the approved construction documents thereunder, or in violation of a permit issued under the provisions of this code, article, or the directive of the code official. Such order may direct the discontinuance of the illegal action or condition and the abatement of the violation.

90.4.2 Prosecution of violation. Delete section.

90.4.3 Violation penalties. Any person who shall violate a provision of this code, or article, or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, remove, extend, or repair any work regulated by this code or article in violation of the approved construction documents or directive of the code official, or of a permit or without a permit, shall be guilty of a misdemeanor and upon conviction thereof shall be fined in a sum not to exceed Two thousand dollars (\$2,000.00) for health or safety violations and not to exceed Five Hundred Dollars (\$500.00) for all other violations. Each day that a violation continues shall be deemed a separate offense.

Article 100; "Scope: amended as follows:

This article contains only those definitions essential to the application of this Code. It is not intended to include commonly defined general terms or commonly defined technical terms from related codes and standards. In general, only those terms that are used in two or more articles are defined in Article 100. Definitions are also found in XXX.s section of other articles. Unless otherwise expressly stated the following words and terms shall, for the purposes of this Code, have the meanings indicated in this article. The provisions of this article shall also apply to other definitions listed elsewhere in this Code.

Add, amend, or delete the following definitions:

Building. A structure that stands alone or that is separated from adjoining structures by fire walls as defined by the building code.

Engineering Supervision. Supervision by a Qualified State of Texas Licensed Professional Engineer engaged primarily in the design or maintenance of electrical installations.

Interchangeability. Words used in the present tense include the future; words in the masculine gender include the feminine and neuter; the singular number includes the plural and the plural, the singular number includes the plural and the plural, the singular.

Intersystem Bonding Termination. A device that provides a means for connecting intersystem bonding conductors for communication systems and other systems to the grounding electrode system. Bonding conductors for other systems shall not be larger than 6 AWG.

Terms defined in other codes. Where terms are not defined in this code and are defined in other City adopted codes, such terms shall have meanings ascribed to them as in those codes.

Terms not defined. Where terms are not defined through the methods authorized by this section, such terms shall have ordinarily accepted meanings such as the context implies.

Article 110.2; change the following to read as follows:

110.2 Approval. The conductors and equipment required or permitted by this Code shall be acceptable only if approved. Approval of equipment may be evident by listing and labeling of equipment by a Nationally Recognized Testing Lab (NRTL) with a certification mark of that laboratory or a qualified third-party inspection agency or a filed evaluation by a Field Evaluation Body accredited by either the International Code Council, International Accreditation Service AC354, or ANSI National Accreditation Board programs and approved by the City of Hurst, TX.

Exception: Unlisted equipment that is relocated to another location within a jurisdiction or is field modified is subject to the approval by the AHJ. This approval may be by a field evaluation by a NRTL or qualified third-party inspection agency or filed evaluation by a Field Evaluation Body accredited by either the ICC IAS AC354 or ANAB programs and approved by the AHJ Manufacturer's self-certification of any equipment shall not be used as a basis for approval by the AHJ.

Informational Note No. 1: See 90.7, Examination of Equipment for Safety, and 110.3, Examination, Identification, Installation, and Use of Equipment. See definitions of Approved, Identified, Labeled, and Listed.

Informational Note No. 2: Manufacturer's self-certification of equipment may not necessarily comply with U.S. product safety standards as certified by an NRTL.

Informational Note No. 3: National Fire Protection Association (NFPA) 790 and 791 provide an example of an approved method for qualifying a third-party inspection agency.

Article 110.80; add to read as follows:

110.80 Primary Power Source. The primary power source for all buildings shall be from an electrical utility provider. Power sources, such as generator power, that supply a service panel for uses without a building, such as gas compressor sites, shall be related by this code.

Exception No 1: Alternate, non-generator power sources, including, but not limited to fuel cell power plants, wind generators, solar panels, etc. are permitted when approved by the Building Official and installed in accordance with the provisions of this code and other city codes.

Exception No 2: Temporary generator power is permitted for buildings that are connected to a normally active utility provider during periods of power outages, such as after a major storm. Any connection to the building power system shall be in compliance with this code.

Exception No 3: Generator power to buildings as a primary power source shall only be permitted when approved by the Building Official. Such approval shall take into consideration all hazards such as fuel delivery, storage and usage, as well as, noise nuisances, and compliance with all other codes and ordinances of this city.

Use of alternate power sources, inclusive of generators, shall not be permitted when the proposed use is in violation of other codes and ordinances of this city.

When permitted, such power source and connection shall be in compliance with this code, the Building Code and Fire Code. The attachment cable to the building shall be considered to be a service entrance conductor.

Article 210.52(G)(1) Garages: delete the following:

(1) Garages. In each attached garage and in each detached garage with electric power. At least one receptacle outlet shall be installed for each car space.

ARTICLE 230.2

Article 230.2(A); add a "Special Condition" 7 to read as follows:

(7) In supplying electrical service to other than single family dwellings, two or more laterals or overhead service drops shall be permitted to a building and they shall be grouped together.

Article 230.2(B)(2); amended to read as follows.

(2) Buildings two-hundred-fifty (250) feet or more in length measured in the most direct path along the exterior of the building shall be permitted one additional service location for each 200 linear feet of exterior wall or fraction thereof facing the same cardinal orientation or elevation. Service locations shall be separated by a minimum of 60 feet. All meters for each service shall be grouped at the same location.

ARTICLE 230.42

Article 230.42(A); add two new paragraphs after item (2) to read as follows:

230.42 Minimum Size and Ampacity.

- (A) General. Service-entrance conductors ...
- (2) The minimum service-entrance conductor size shall have an ampacity not less than the maximum load to be served after the application of any adjustment or correction factors.

Service entrance conductors after the utility provider point of delivery or service point shall be subject to the requirements of this code and shall be sized based upon the overcurrent protection provided.

When the utility provider service conductors connect directly to the service equipment disconnecting means, the utility provider's service cables shall be subject to the requirements of this code and shall be sized based upon the service equipment overcurrent device.

ARTICLE 230.70

Article 230. 70(A): add a "Special Condition" 4 to read as follows:

230.70 **General.** Means shall be provided to disconnect all ungrounded conductors in a building or other structure from the service conductors.

- (A) Location. The service disconnecting means shall be installed in accordance with 230.70 (A) (1), (A) (2), (A) (3), and (A) (4).
 - (4) **Special Condition.** Where more than one electrical service is installed, all disconnecting means shall be grouped in the same location in accordance with one of the following:
 - All inside the building.
 - (2) All outside and attached to the building

Article 230.71(A); add the following exception:

Exception: Multi-occupant buildings. Individual service disconnecting means is limited to six for each occupant. The number of individual disconnects at one location may exceed six.

Article 240.91; delete the Article.

Article 400.8 Field Identification Required: Change the following to read as follows

408.4 Field Identification Required.

(A) Circuit Directory or Circuit Identification.

Every circuit and circuit modification shall be legibly identified as to its clear, evident, and specific purpose or use. The identification shall include an approved degree of detail that allows each circuit to be distinguished from all others. Spare positions that contain unused overcurrent devices or switches shall be described accordingly. The identification shall be included in a circuit directory that is located on the face or inside of, or in an approved location adjacent and permanently affixed the panel door in the case of a panelboard and at each switch or circuit breaker in a switchboard or switchgear. No circuit shall be described in a manner that depends on transient conditions of occupancy.

Article 410.118: Change the following to read as follows

410.118 Access to other boxes.

Luminaires recessed in the ceilings, floors, or walls shall not be used to access outlet, pull, or junction boxes or conduit bodies, unless the box or conduit body is an integral part of the listed luminaire.

Exception: removable luminaires with a minimum measurement of 22 in. X 22 in. shall be permitted to be used as access to outlet, pull, junction boxes or conduit bodies.

Article 422.31 B: Change the following to read as follows

422.31 B Appliances Rated over 300 Volt-Amperes

(B) Appliances Rated over 300 Volt-Amperes. For permanently connected appliances rated over 300 volt-amperes, the branch-circuit switch or circuit breaker shall be permitted to serve as the disconnecting means where the switch or circuit breaker is within sight from and is readily accessible to the appliance it serves or is capable of being locked in the open position in accordance with 110.25 and is readily accessible to the appliance it serves.

Informational Note No. 1: For appliances employing unit switches, see 422.34.

Informational Note No 2: The following means of access are considered to constitute readily accessible for this code change when conforming to the additional access requirements of the I Codes:

- (1) A permanent stair;
- (2) A pull-down stair with a minimum 300 lb. (136 kg) capacity;
- (3) An access door from an upper floor level.

Article 500.8 (A) (3); change to read as follows:

500.8 Equipment.

Articles 500 through 504 require equipment construction and installation that ensure safe performance under conditions of proper use and maintenance.

Informational Note No. 1: It is important that inspection authorities and users exercise more than ordinary care with regard to installation and maintenance.

Informational Note No. 2: Since there is no consistent relationship between explosion properties and ignition temperature, the two are independent requirements.

Informational Note No. 3: Low ambient conditions require special consideration. Explosion proof or dustignition proof equipment may not be suitable for use at temperatures lower than -25°C (-13°F) unless they are identified for low-temperature service. However, at low ambient temperatures, flammable concentrations of vapors may not exist in a location classified as Class I, Division 1 at normal ambient temperature.

(A) Suitability. Suitability of identified equipment shall be determined by one of the following:

- (1) Equipment listing or labeling;
- (2) Evidence of equipment evaluation from a qualified testing laboratory or inspection agency concerned with product evaluation; or,
- (3) Evidence acceptable to the authority having jurisdiction such as a manufacturer's self-evaluation or an owner's engineering judgment. An engineering judgment signed and sealed by a qualified licensed Professional Engineer of the State of Texas.

Informational Note: Additional documentation for equipment may include certificates demonstrating compliance with applicable equipment standards, indicating special conditions of use, and other pertinent information.

Article 505.7 (A) changed to read as follows:

505.7 Special Precaution.

Article 505 requires equipment construction and installation that ensures safe performance under conditions of proper use and maintenance.

Informational Note No. 1: It is important that inspection authorities and users exercise more than ordinary care with regard to the installation and maintenance of electrical equipment in hazardous (classified) locations.

Informational Note No. 2: Low ambient conditions require special consideration. Electrical equipment depending on the protection techniques described by 505.8(A) may not be suitable for use at temperatures lower than -20°C (-4°F) unless they are identified for use at lower temperatures. However, at low ambient temperatures, flammable concentrations of vapors may not exist in a location classified Class I, Zones 0, 1, or 2 at normal ambient temperature.

Implementation of Zone Classification System. Classification of areas, engineering and design, selection of equipment and wiring methods, installation, and inspection shall be performed by a qualified persons Registered-licensed Professional Engineer of the State of Texas

Article 517.30 Essential Electrical Systems for Hospitals; create a new (H) and add the following language:

(G) Coordination. Overcurrent protective devices serving the equipment branch of the essential electrical system shall be coordinated for the period of time that a fault's duration extends beyond 0.1 second.

Exception No. 1: Between transformer primary and secondary overcurrent protective devices, where only one overcurrent protective device or set of overcurrent protective devices exists on the transformer secondary.

Exception No. 2: Between overcurrent protective devices of the same size (ampere rating) in series.

Informational Note: The terms coordination and coordinated as used in this section do not cover the full range of overcurrent conditions.

(H) Selective Coordination. Overcurrent protective devices serving the life safety, and critical branches of the essential electrical system shall be selectively coordinated with all supply-side overcurrent protective devices.

Exception No. 1: Between transformer primary and secondary overcurrent protective devices, where only one overcurrent protective device or set of overcurrent protective devices exists on the transformer secondary.

Exception No. 2: Between overcurrent protective devices of the same size (ampere rating) in series.

Article 695.6 A 1: Change the following to read as follows

695.6 (A) Supply Conductors.

(1) Services and On-Site Power Production Facilities.

Service conductors and conductors supplied by on-site power production facilities shall be physically routed outside a building(s) and shall be installed as service-entrance conductors in accordance with 230.6, 230.9, and Parts III and IV of Article 230. Where supply conductors cannot be physically routed outside of buildings, the conductors shall be permitted to be routed through the building(s) where installed in accordance with 230.6(1) or (2).

Exception: The supply conductors within the fire pump room shall not be required to meet 230.6 (1) or (2)

Article 71.15 A: Change the following to read as follows

710.15 General

710.15(A) Supply Output.

Power supply to premises wiring systems fed by stand-alone or isolated microgrid power sources shall be permitted to have less capacity than the calculated load. The capacity of the sum of all sources of the stand-alone supply shall be equal to or greater than the load posed by the largest single utilization equipment connected to the system. Calculated general lighting loads shall not be considered as a single load have adequate capacity to meet the calculated load in accordance with Article 220.

Informational Note: For general-use loads the system capacity can be calculated using the sum of the capacity of the firm sources, such as generators and ESS inverters. For specialty loads intended to be powered directly from a variable source, the capacity can be calculated using the sum of the variable sources, such as PV or wind inverters, or the combined capacity of both firm and variable sources.

Sec. 5-169. - Identification of vehicles.

Each licensed master electrician shall have his company name and his electrician's license number, permanently affixed on each front door of each truck or vehicle which operates in connection with the installation, alteration or repair of electrical wiring within the city, in letters and numerals of at least two and one-half (2½) inches in height. Such name and number shall be the same for all vehicles so operated by any one licensed master electrician. Such name and number shall not be of the plastic magnetic type.

Sec. 5-170. - Sale of unapproved equipment.

It shall be unlawful for any person to sell, expose for sale, offer to sell, dispose as a premium, offer for rent or repair any electrical material, conductor, equipment, apparatus or appliance within the city for use in the city which is not approved by the inspector or which does not have affixed thereto an Underwriters' Laboratories, Inc., label or which has not previously been approved by the Underwriters' Laboratories, Inc., or some similar or equivalent organization.

Sec. 5-171. - Posting and service of notices.

When any order or notice is issued pursuant to the provisions of this article to any person who cannot be found after a reasonable search, such order or notice may be served by posting it in a conspicuous place upon the premises where the defects are alleged to exist. Such posting of the notice shall be considered equivalent to personal service of such order or notice. An order sent by mail in a sealed

envelope with postage prepaid and directed to the address of the electrical contractor, owner, lessee or occupant of the premises shall be equivalent to personal service of such order.

The inspector is hereby empowered to attach to the nearest electrical cabinet or equipment feeding defective or hazardous wiring any official notice or seal to prevent use of electricity in that area, and it shall be unlawful for any other person to place or attach such seal, or to break, change, destroy, tear, mutilate, cover or otherwise deface or injure any such official notice or seal posted by the electrical inspector.

Sec. 5-172. - Electric fences; approved controller required.

No person shall install, maintain or operate an electrically charged fence unless the same is charged by a fence controller properly installed and in good operating condition which has been approved by an approved testing agency.

Sec. 5-173. - Liability for damages.

This article shall not be construed to relieve from or lessen the responsibility or liability of any party owning, operating, controlling or installing any electrical equipment for damages to persons or property caused by any defect therein, nor shall the city be held as assuming any such liability by reason of the inspection or reinspection authorized in this article, the certificate of approval issued as provided in this article, or by reason of the approval or disapproval of any equipment authorized in this article.

Secs. 5-174-5-185. - Reserved.

DIVISION 2. - CODE OFFICIAL

Sec. 5-186. - Duties Generally

It shall be the duty of the code official to enforce the provisions of this article. The City of Hurst shall, upon application, with required identification, and all necessary documents, grant permits for the installation, extension, repair, removal, or alteration of electrical conductors and equipment and shall make inspections of all electrical work as provided for in this article. Complete records of all permits issued, inspections and re-inspections made and other official work performed in accordance with the provisions of this article shall be kept.

Sec. 5-187. - Reserved.

Sec. 5-188. - Authority to stop work.

In case any work is begun where a permit is required by this chapter, but without permission or permits being first secured therefor, or if electrical work is otherwise being made in violation of this article, the code official shall have the power to stop such work at once and to order any and all persons engaged therein to stop and desist therefrom until the proper permission is secured. Such action shall not defer any other penalties which may be applicable under this article.

Sec. 5-189. - Prohibited interests.

It shall be unlawful for the code official to engage in the business of selling, installing or maintenance of electrical conductors, devices, appliances, apparatus or equipment, and shall have no financial interest in any concern engaged in such business at any time while employed by the City of Hurst.

Sec. 5-190. - Liability for damages.

Where action is taken by the code official to enforce the provisions of this article, such acts shall be done in the name of and on behalf of the City of Hurst; and the code official, in so acting for the city, shall not render themselves personally liable for any damage which may accrue to persons or property as a result of any act committed in good faith in the discharge of duties, and any suit brought against the code official by reason thereof shall be defended by the city attorney until final termination of the proceedings contained therein.

Sec. 5-191. - Right of entry.

The code official shall have the right, during reasonable hours, to enter any building or premises in the discharge of official duties, or for the purpose of making any inspection, re-inspections or tests of the electrical equipment or conductors contained therein.

Sec. 5-192. - Inspections generally.

Upon the completion of any electrical construction for which a permit has been obtained under this article, it shall be the duty of the person performing the work to request an inspection(s). Inspections are generally inspected within forty-eight (48) hours, exclusive of Saturdays, Sundays and holidays, of the time such notice is given.

When any electrical equipment or conductors are to be hidden from view by the placement of parts of the building, such equipment or conductors shall not be concealed until it has been inspected, and approved or authorized by the code official. On large installations, where the concealment of equipment proceeds continuously, the person installing the electrical equipment may request periodical inspections over the progress of work.

The code official shall have the authority to require building contractors or the person doing or responsible for the work, to remove work which in any manner conceals electrical wiring, systems, or equipment that has been concealed without their knowledge or permission, and in no case shall the code official issue clearance or approval until satisfied that the work is in accordance with the provisions of this article. The code official shall also have the right to refuse to issue approval or clearance on any wiring, system, conductors, or equipment that is concealed in such a manner that it cannot be fully determined that it has been done in accordance with this article.

If, upon inspection under this section, the electrical work is not found to be fully in conformity with the provisions of this article, the code official shall notify the person making the installation of the existing defects.

Sec. 5-193. - Approval.

When the code official finds the electrical work to be in conformity with the provisions of this article, the code official shall approve and authorize the use of the electrical work and connection to the electrical supply electronically.

When approval is issued authorizing the connection and use of a temporary installation, such approval shall expire at a time to be stated therein and shall be revocable for cause by the code official.

Permission may be given authorizing the connection and use of certain specified portions of an incomplete installation. Such permission shall be revocable at the discretion of the code official.

In no case shall approval be issued on installations or parts of installations where the work installed does not conform to the requirements of this article. No approval shall be issued unless the electric

conductors or equipment has been installed in strict conformity with the provisions of this article and the statutes of the state, and unless the work is made in compliance with nationally approved methods of construction for safety to life and property.

The code official shall be deemed the judge of whether the work of electric conductors and equipment has been made in accordance with the requirements of this article.

It shall be unlawful for any person to make connection to a supply of electricity or to any electrical equipment for which a permit is required by this article, or which has been disconnected by the order of the code official, until approval has been issued by the code official authorizing the connection and use of such equipment; provided, however, that the code official may authorize a temporary connection.

Sec. 5-194. - Periodic re-inspections.

The electrical inspector shall periodically reinspect existing installations of electrical conductors and equipment.

When the electrical work of any conductors or equipment is found to be in a dangerous or unsafe condition, the person owning, using, operating, or responsible for the work shall be notified in writing and shall make the necessary repairs or changes required to place such conductors or equipment in safe condition and have such work completed within the period specified by the code official.

Sec. 5-195. - Authority to order repair or disconnection.

When any electrical equipment or conductors are found by the code official to be dangerous to persons or property because it is defective or improperly installed, the person responsible for the equipment shall be notified in writing and shall make any changes or repairs required, in the judgment of the code official, to place such equipment in safe condition. If such work is not completed within the time specified by the code official in such notice, the building official shall have the authority to disconnect or order the discontinuance of electric service to the electrical equipment. In cases of emergency, when necessary for safety to persons or property, or when electrical equipment may interfere with the work of the fire department, the building official shall have the authority to immediately disconnect or cause the disconnection of any electrical equipment. Permits shall be obtained before work begins except in cases of emergency, the permit shall be obtained within 48 hours.

Secs. 5-196-5-205. - Reserved

DIVISION 3. – RESERVED

Secs. 5-206-5-225. - Reserved.

DIVISION 4. – LICENSED ELECTRICIANS

Sec. 5-226. – Required

It shall be unlawful for any person who is not licensed through the State of Texas as a qualified electrician to make any installations, repairs, alterations, additions, removal or changes to any system or existing system of electrical conductors, wiring, apparatus, conductors, or equipment within the city without securing a permit, except as otherwise provided in this section. No one shall perform electrical related work out of the scope for which they are licensed for through Texas Department of Licensing and Regulation.

Nothing contained in this section shall prohibit any bona fide homeowner from personally installing electrical conductors or equipment within their own home; provided, that the owner shall secure a

permit, pay required fees, do work in accordance with this article, request inspection(s) and receive approval from the code official. Personal installation by an owner under this subsection shall be by themselves, for themselves, on their own homestead, and without compensation, and no person shall be employed to assist in any way on such work.

The following classes of work may be carried out by persons who are not registered electricians:

- 1. The replacement of lamps and fuses and the connection of portable devices to suitable receptacles which have been permanently installed;
- The installation, alteration or repairing of any wiring, devices or equipment for the operation of signal or the transmission of intelligence where such wiring, devices, appliances or equipment are operated at a voltage not exceeding thirty (30) volts, between conductors, and do not include generating or transforming equipment;
- 3. The installation, alteration or repair of electric wiring, devices, appliances and equipment installed by or for an electrical public service corporation operating under a franchise from the city when for the use of such corporation in the generation, transmission, distribution or metering of the electrical energy or for the use of such a corporation in the operation of street railways, signals or the transmission of intelligence as specified in section 5-160;
- 4. Any work involved in the manufacture or test of electrical materials, devices, appliances or apparatus, but not including any installation wiring other than that required for testing purposes, if such equipment as completed is approved by the electrical inspector before it is installed or used within the city;
- 5. Any work involved in any factory in the manufacture, fabrication or test of products, equipment or devices wherein electrical wiring, apparatus, devices or equipment is installed, fabricated, manufactured, incorporated or otherwise attached.

Nothing contained in this section shall prohibit any person from using their regular electrical maintenance employees for installing, repairing, altering, extending, removing or maintaining electrical conductors or equipment within or on the premises occupied by such persons, provided such installation, repair, alteration, extension, removal and/or maintenance is completed in accordance with the provisions of this article and the National Electrical Code. Upon the completion of any such repairs, additions, extensions, removal, maintenance or installation of electrical work referred to in this section, the person shall request an inspection of such work. Should any violations or hazardous conditions be found, they shall be corrected within a reasonable period of time as determined by the code official. For the purpose of determining a hazardous condition, the National Electrical Code referred to in this article shall be used as the criteria. Any electrical work which upon completion will be concealed shall receive a rough-in inspection prior to concealment.

Sec. 5-227 - 5-231 Reserved.

Sec. 5-232. - Transfer, alteration, etc.

It shall be unlawful for any person to lend, rent or transfer their license or permit or any rights therein contained to any other person, and for any person to make use of any such rights which are not actually their own.

Sec. 5-233 - 5-238 Reserved

Sec. 5-239. - False representation.

It shall be unlawful for any person to falsely represent themselves as a licensed electrician or to use the words "electrical contractor," "master electrician," "electrician," or words of similar import or

maintenance personnel, or homestead homeowner or meaning on signs, cards, stationery or by any other manner whatsoever.

Secs. 5-240—5-250. - Reserved.

DIVISION 5. - WORK PERMITS

Sec. 5-251. - Required.

It shall be unlawful for any person to perform any electrical work on any electrical conductors or equipment within or on any building, structure or on any premises, publicly or privately owned, or to make or cause to be made any alteration, addition, repair, maintenance, removal, or installation to any existing electrical conductors or equipment without securing a permit therefore from the City of Hurst's Building Inspection Department, except as otherwise provided in this article. No permit will be required, however, to execute any of the following classes of electrical work:

- 1. The replacement of lamps, fuses or the connection of portable electrical equipment to suitable permanently installed receptacles;
- 2. Any work involved in the manufacture, fabricating, repair or testing of electrical equipment, products, apparatus or devices manufactured, produced or used in any factory or manufacturing facility.
- 3. A permit shall be secured for all electric signs manufactured by licensed electrical sign contractors which are not approved by the Underwriters' Laboratories, Inc., and are to be sold, erected or installed in the city.
- 4. A permit shall be secured for all electrical changes, installations and revisions that are done in electrical elevators. No permit shall be required when electrical conductors or equipment are being maintained by repairs or replacement.

Sec. 5-252. - Application.

Application for a permit under this division, describing the work to be done, shall be made to the City of Hurst by the person performing the electrical work. The application shall be accompanied by such information or documents as may be necessary to determine whether the installation as described will be in conformity with the requirements of this article. The applicant shall state the size of conductors to be used for all services, mains, feeders and sub feeders, the size of main and sub feeder switches and fuses, the area to be served by such conductors, outlet and switches locations, and the basis used in computing the required sizes of such conductors.

Sec. 5-253. - Permit fees.

Any person granted a permit under this division shall pay to the Building Inspection Department a fee therefore to cover the costs of inspection under this article. Such fees shall be established from time to time by the city manager.

Whenever any electrical work for which a permit is required by this article has been commenced without first obtaining such permit, the fee shall be doubled.

The permit fee shall include the cost of the initial inspection and one (1) reinspection. If a second reinspection is required, an additional fee, established from time to time by the city manager, shall be charged to the defaulting person for the second reinspection and for each inspection required thereafter.

Sec. 5-254. - Issuance.

If it is found that the electrical work, as described in an application under this division, will conform with all legal requirements and if the applicant has complied with all provisions of this article, a permit for such installation shall be issued.

Sec. 5-255. - Failure to correct defects.

If permit holder fails to correct or have corrected any defects, errors or deficiencies in any electrical work done under the authority of an issued electrical permit, within ten (10) calendar days, after electronic or written notification thereof by the code official or within such reasonable time as determined by the code official, the code official shall, without further notice, stop the issuance of permits to such electrician or applicant until such corrections have been made, inspected and approved. In addition, thereto, the penalty provided for violation of this article may be enforced.

Sec. 5-256. - Expiration.

Every permit issued by the City of Hurst under the provisions of this division shall expire by limitation and become null and void if the work authorized by such permit has not been started within six (6) months from the date of the permit, or if the work authorized by such permit is suspended or abandoned at any time for a period of six (6) months after the work is started. Before the work can be started again, a new permit shall be obtained.

Sec. 5-257. - Revocation.

The code official is authorized to revoke and declare null and void any permit obtained under this division by fraud, misrepresentation or in any way contrary to the requirements of this article. Such a permit may also be revoked and declared null and void by the code official for any violation of the provisions of this article or for any other just cause.

Sec. 5-258. - Cancellation and reissuance.

The code official is authorized to revoke a permit if work or corrections are not completed after ten (10) days' notice or within the time-frame determined by the code official. Such notice shall be in writing and given by the code official to the permit holder. After cancellation of such permit, a second permit may be issued by the City of Hurst Building Inspections Department as though the first permit had never been issued.

Sec. 5-259. - Deviation.

No deviation shall be made from the electrical work described in the permit issued under this division, without notifying and receiving approval from the City of Hurst Building Inspections Department. The issuance of a permit shall not be taken as permission to violate any of the requirements of this article.

Sec. 5-260. - Securing permit for person not entitled.

It shall be unlawful for any person to secure for or furnish a permit for the electrical work, installation, addition, removal, extension, maintenance, alteration or repair of electrical conductors or equipment to any person not entitled to such permit under the regulations of this article.

Secs. 5-261—5-275. - Reserved.