ORDINANCE NO. 2025-08-____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MCKINNEY, TEXAS, AMENDING CHAPTER 42, "FIRE PREVENTION AND PROTECTION," OF THE CODE OF ORDINANCES OF THE CITY OF MCKINNEY, TEXAS, BY REPEALING ARTICLE II, "FIRE CODE," IN ITS ENTIRETY AND ADOPTING A NEW ARTICLE II, ENTITLED "FIRE CODE," TO ADOPT THE 2024 EDITION OF THE INTERNATIONAL FIRE CODE TOGETHER WITH APPENDICES B THROUGH O, THERETO, AND CERTAIN LOCAL AMENDMENTS INCLUDING, BUT NOT LIMITED TO, CERTAIN AMENDMENTS RECOMMENDED BY THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS, PROVIDING FOR ENFORCEMENT, AND AMENDING APPENDIX A, "SCHEDULE OF FEES," AS IT RELATES TO CHAPTER 42, "FIRE PREVENTION AND PROTECTION"; REPEALING ALL CONFLICTING ORDINANCES; PROVIDING A SAVINGS CLAUSE; PROVIDING A SEVERABILITY CLAUSE; PROVIDING FOR A PENALTY; AND PROVIDING AN **EFFECTIVE DATE**

- WHEREAS, the City of McKinney, Texas (the "City") is a Home Rule City possessing the full power of local self-government pursuant to Article 11, Section 5 of the Texas Constitution, Section 51.072 of the Texas Local Government Code, and the City's Home Rule Charter; and
- **WHEREAS,** a new edition of the *International Fire Code* is produced every three years, and the 2024 Edition of the *International Fire Code* has recently been issued by the International Code Council; and
- **WHEREAS**, the current edition of the *International Fire Code* adopted for the City of McKinney is the 2021 Edition of the *International Fire Code*; and
- WHEREAS, a committee of fire code professionals works through the North Central Texas Council of Governments ("NCTCOG") to recommend local amendments specific to the needs of North Central Texas, which the City has consistently adopted with only minor modifications; and
- **WHEREAS**, the adoption of the 2024 Edition of the *International Fire Code*, including the local amendments, will provide the most current life safety applications with respect to construction, occupancy, use and maintenance of buildings and structures located within the City; and
- WHEREAS, the creation of the 2024 International Codes by the International Code Council was in conjunction with the International Conference of Building Officials ("ICBO"), the organization whose codes the City of McKinney has adopted since the 1970's; and
- **WHEREAS,** *International Fire Code* certifications will be based on examinations conducted under the 2024 International Codes, so that adoption of the 2024 Edition of the *International Fire Code* will facilitate such examinations; and
- WHEREAS, the City Council of the City of McKinney, Texas, deems it to be in the best interest of the citizens of the City to update its fire code standards and adopt the 2024 Edition of the *International Fire Code* together with Appendices B through O, thereto, as further amended herein, as the minimum standard for the continued construction, occupancy, use and maintenance of buildings and structures within the City's jurisdictional authority.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MCKINNEY, TEXAS, THAT:

Section 1. All of the above premises are found to be true and correct legislative determinations and are incorporated into the body of this Ordinance as if copied in their entirety.

Section 2. From and after the effective date of this Ordinance, Article II, entitled "Fire Code," of Chapter 42 of the Code of Ordinances of the City of McKinney, is hereby deleted and repealed in its entirety and replaced with a new Article II, entitled "Fire Code," to read as follows:

"ARTICLE II. FIRE CODE

Sec. 42-23. - Adoption of International Fire Code, 2024 Edition.

The International Fire Code, 2024 Edition, including Appendices B, C, D, E, F, G, H, I, J, K, L, M, N and O (see International Fire Code Section 101.2.1, 2024 edition) as published by the International Code Council together with such other amendments as are set forth herein are hereby adopted and designated as the Fire Code of the City to serve as a general standard for purposes of regulating and governing the safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises as herein provided; providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, penalties, conditions and terms of said Fire Code on file in the office of the City Secretary are hereby referred to, adopted, and made a part hereof, as if fully set out in this ordinance, with the additions, insertions, deletions and changes, if any, of this ordinance. Unless deleted, omitted, expanded or otherwise changed herein, all provisions of such International Fire Code, 2024 Edition, as amended, shall be fully applicable and binding and in full force and effect. A copy of the International Fire Code, 2024 Edition, together with such other amendments as are set forth herein, referred to herein shall be kept on file in the office of the City Secretary.

Sec. 42-24. - Enforcement.

The Fire Chief, or his designee, is hereby authorized and directed to enforce all provisions of the Fire Code within the City's corporate limits and, to the extent permitted by applicable state law, the City's extraterritorial jurisdiction and in accordance with Section 122-4 of the Code of Ordinances of the City of McKinney, Texas.

Sec. 42-25. - Definitions.

The following words, terms and phrases, when used in the Fire Code adopted in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

- (a) Whenever the word "jurisdiction" is used in the *International Fire Code*, 2024 Edition, it shall mean the corporate limits of the City of McKinney, Texas, and to the extent permitted by applicable state law, the extraterritorial jurisdiction of the City of McKinney.
- (b) Whenever the phrase "Fire Code" is used in this Article is shall mean the *International Fire Code*, 2024 Edition, together with Appendices B, C, D, E, F, G, H, I, J, K, L, M, N, and O of the *International Fire Code*, 2024 Edition, as all of the foregoing are amended by the amendments set forth in this Ordinance.
- (c) Whenever the phrase "Fire Chief" is used in the *International Fire Code*, 2024 Edition, it shall mean the Fire Chief of the McKinney Fire Department or their designee.
- (d) Whenever the phrase "Code Official" or "Fire Code Official" is used in the *International Fire Code*, 2024 Edition, it shall mean the Fire Marshal of the McKinney Fire Department or their designee.
- (e) When the acronym "MFD-FMO" is used it shall mean the McKinney

Fire Department's Fire Marshal's Office.

(f) Whenever the phrase "Police Chief" is used in the *International Fire Code*, 2024 Edition, it shall mean the Chief of Police of the McKinney Police Department or their designee

Sec. 42-26. - Fire Code Amendments.

The regional amendments to the *International Fire Code*, 2024 Edition, recommended by the North Central Texas Council of Governments ("NCTCOG Amendments") to repeal and reenact or add sections to the *International Fire Code*, 2024 Edition, are hereby adopted by the City of McKinney, Texas, and incorporated herein by reference just as though such amendments were set forth herein in their entirety, to amend the *International Fire Code*, 2024 Edition. In addition, the following amendments further repeal and reenact or add sections to the *International Fire Code*, 2024 Edition, adopted in this article for the purpose of consistency with specific past practices and the recommendations of the North Central Texas Council of Governments, and all sections not expressly amended remain in full force and effect as adopted:

- (1) **Section 101.1** is hereby amended to read as follows:
 - **101.1 Title.** These regulations shall be known as the Fire Code of the City of McKinney, hereinafter referred to as "this code."
- (2) Section 102.1 Item 3 is hereby amended to read as follows:
 - 3. Existing structures, facilities, and conditions when required in Chapter 11 or in specific sections of this code.
- (3) **Section 102.5 Item 1** is hereby amended to read as follows:
 - 1. Construction and design provisions of this code pertaining to the exterior of the structure shall apply including, but not limited to premise identification, fire apparatus access, hose lay distances, and water supplies. {remainder unchanged}.
- (4) **Section 102.7.2** is hereby amended by adding a new **Section 102.7.2.1** to read as follows.
 - **102.7.2.1 Applicable editions.** The most current published edition will be recognized where an NFPA standard is referenced.
- (5) **Section 102.7** is hereby amended by adding **Section 102.7.3** to read as follows:
 - **102.7.3 Design guides.** "Design guides" as reference in this code are published with the intent and have the effect as provided for in Section 104.2 of this code.

- (6) **Sections 103.1, 103.2, and 103.3** are hereby amended to read as follows:
 - **103.1 General.** The Fire Code shall be enforced by the Division of Fire Prevention. The Division of Fire Prevention is hereby established as a division of the Fire Department of the City of McKinney, Texas and shall operate under the supervision of the Fire Chief. The function of the division shall be the implementation, administration, and enforcement of this Code.
 - **103.2 Appointment.** The Fire Marshal in charge of the Division of Fire Prevention shall be appointed by the Fire Chief on the basis of proper qualifications.
 - **103.3 Deputies.** The Fire Chief may detail such members of the Fire Department as deputies, inspectors, and other technical officers as shall from time to time be necessary and each member so assigned shall be authorized to enforce the provisions of the *International Fire Code*.
- (7) **Section 104.2.3** is amended by deleting the exception.
- (8) Section 104.6 is hereby amended to read as follows.
 - **104.6 Notices and orders.** The Fire Code Official is authorized to issue necessary notices or orders to ensure compliance with this code. Notices of violation shall be in accordance with Section 113.
- (9) **Section 105.3.3** is hereby amended to read as follows:
 - **105.3.3 Occupancy prohibited before approval.** The building or structure shall not be occupied prior to the Fire Code Official issuing a permit when required and conducting associated inspections indicating the applicable provisions of this code have been met.
- (10) **Section 105.5** is hereby amended to read as follows:
 - **105.5 Required operational permits.** The Fire Code Official is authorized to issue operational permits for the operations set forth in Sections 105.5.1 through 105.5.58.

A new construction permit shall be required where the details of an operational permit has been changed or modified; or, where an operational permit has not been issued or has expired.

- (11) **Section 105.5** is hereby amended by adding Section 105.5.58, to read as follows:
 - **105.5.58 Fire Fighter Air Replenishment System**. An operational permit is required to maintain a FARS.
- (12) **Section 105.6** is hereby amended to read as follows:
 - **105.6 Required construction permits.** The Fire Code Official is authorized to issue construction permits for work set forth in Sections 105.6.1 through 105.6.28.
- (13) **Section 105.6** is hereby amended by adding **Section 105.6.26** to read as follows:
 - **105.6.26 Electronic access control systems**. Construction permits are required to install or modify an electronic access control system, as specified in Chapter 10. A separate construction permit is required to install or modify a fire alarm system that may be connected to the access control system. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.
- (14) **Section 105.6** is hereby amended by adding **Section 105.6.27** to read as follows:
 - **105.6.27 Electric vehicle (EV) charging stations.** Construction permits are required to install or modify an electric vehicle charging station. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.
- (15) **Section 105.6** is hereby amended by adding **Section 105.6.28** to read as follows:
 - **105.6.28 Emergency and Standby Generators**. Construction permits are required for the installation or modification of an emergency or standby generator, as specified in Section 1203.
- (16) **Section 108.1** is hereby amended to read as follows:
 - **108.1 Fees.** A permit shall not be issued_nor shall an amendment to a permit be released, nor shall an inspection or reinspection be scheduled until all applicable *fees* have been paid.
- (17) **Section 108.2** is hereby amended to read as follows:

- **108.2 Schedule of fees.** Fees shall be assessed in accordance with Appendix A, "Schedule of Fees," to the Code of Ordinances, City of McKinney, Texas.
- (18) **Section 108.3** is hereby amended by deleting it in its entirety.
- (19) **Section 108.4** is hereby amended to read as follows:
 - **108.4 Work commencing before permit issuance**. No person, firm, partnership, corporation, association, or other entity shall begin any work, activity, or operation regulated by this code without first obtaining the required permits. A violation of this section is a misdemeanor. Upon conviction, the violator shall be subject to a fine not to exceed two thousand (\$2,000.00). Each day that the violation continues shall be considered a separate and distinct offense.
- (20) **Section 108** is hereby amended by adding a new **Section 108.7** to read as follows:
 - **108.7 Condition to lawful occupancy.** Any occupant, lessee, or person making use of a building or premises who fails to pay fee accessed in accordance with this code within thirty (30) days of being billed is subject to termination of their certificate of occupancy.
- (21) **Section 109.2** is hereby amended by adding **Section 109.2.3** to read as follows:
 - **109.2.3** Release of system prior to final approval. No regulated system, whether permitted or not, shall be placed in operation without first obtaining a final acceptance inspection.
- (22) **Section 110.3** is hereby amended by adding a new **Section 110.3.1** to read as follows:
 - **110.3.1 ITM** and deficiency reporting. Service providers performing required inspection, testing, and/or maintenance, or who are required by licensing agencies to notify system deficiencies and corrections to the AHJ shall provide said report to the Fire Code Official by approved electronic means as provided in the MFD-FMO ITM and Deficiency Reporting Guide.
- (23) **Section 112.1** is hereby amended to read as follows:
 - **112.1 Appeals.** Whenever the Fire Code Official shall disapprove an application or refuse to grant a permit applied for, or when it is claimed that the provisions of this Code do not apply or that the true

intent and meaning of this Code have been misconstrued or wrongly interpreted, the applicant may appeal from the decision of the Code Official to the Fire Chief within thirty (30) days from the date of the decision appealed.

- (24) **Section 112.2** is hereby amended to read as follows:
 - **112.2 Limitations on authority.** An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equivalent or better form of construction proposed. The Fire Chief shall not have the authority to waive the requirements of this code.
- (25) **Section 112.3** is hereby deleted in its entirety.
- (26) **Section 112.4** is hereby amended to read as follows:
 - **112.4 Administration.** The Fire Code Official shall take action without delay in accordance with the decision of the Fire Chief.
- (27) **Section 113.4** is hereby amended to read as follows:
 - **113.4 Violation penalties.** Any person, firm, partnership, corporation, association, or other entity violating any provision of this article or of any Code provision adopted herein shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall be fined in the sum of not more than \$2,000.00, and each day such violation continues shall constitute a separate and distinct violation.
- (28) **Section 113.4** is hereby amended by adding **Section 113.4.2** to read as follows:
 - **113.4.2 Applicability.** A person, firm, partnership, corporation, association, or other entity shall be presumed to be the violator if the person, firm, partnership, corporation, association, or other entity is the owner of occupant of the subjected property, exercises actual or apparent control over the subject property, or is listed as the water customer of the city for the subject property.
- (29) **Section 114.2** is hereby amended to read as follows:
 - **114.2 Issuance.** When a stop work order is issued, all work shall immediately stop. The order will be issued to the property owner, property manager, the owner's authorized representative, the construction manager, the site manager, an owner or representative

of the business doing the work, or the person doing the work. The stop work order is considered issued when the city official verbally orders the work to stop. This shall be followed by a written stop work order provided on-site. The written stop work order shall explain why the work was stopped and what needs to be done before the work can resume.

(30) **Section 114.4** is hereby amended to read as follows:

114.4 Failure to comply. Any person, firm, partnership, corporation, association, or other entity who shall continue any construction or related activity after being issued a stop work order, except as expressly authorized by the Fire Code Official to correct a violation or eliminate an unsafe condition, shall be deemed guilty of a misdemeanor and, upon conviction, the violator shall be subject to a fine not to exceed two thousand dollars (\$2,000.00). Each day such violation continues shall constitute a separate and distinct violation.

(31) Section 202 is hereby amended to add certain new definitions to be inserted in the existing list of definitions in alphabetical order and to amend certain of the current definitions, in whole or in part, to read as follows:

AMBULATORY CARE FACILITY. Buildings or portions thereof used to provide medical, surgical, psychiatric, nursing, or similar care on a less than 24-hour basis to persons who are rendered incapable of self-preservation by the services provided. This group may include but not limited to the following:

- Dialysis centers
- Sedation dentistry
- Surgery centers
- Colonic centers
- Psychiatric centers

ASSISTED LIVING FACILITIES. A building or part thereof housing persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff.

CARBON MONOXIDE SOURCE. A combustion process that has the potential to produce carbon monoxide as a product of combustion under normal or abnormal conditions. Carbon monoxide sources include, but are not limited to solid-, liquid-, or gas-fired appliances,

equipment, devices, or systems, such as fireplaces, furnaces, heaters, boilers, cooking equipment, and vehicles with internal combustion engines.

CARBON MONOXIDE SOURCE, DIRECT. A permanently installed carbon monoxide source that is located in an interior space.

CARBON MONOXIDE SOURCE, INDIRECT. A carbon monoxide source connected to an interior space by a forced air supply duct.

FIRE WATCH. A temporary measure intended to ensure continuous and systematic surveillance of a building or portion thereof by one or more qualified individuals or standby personnel when required by the Fire Code Official, for the purpose of identifying and controlling fire hazards, detecting early signs of unwanted fire, raising an alarm of fire and notifying the fire department.

FIREWORKS. Any composition or device for the purpose of producing a visible or an audible effect for entertainment purpose by combustion, deflagration, detonation, and/or activated by ignition with a match or other heat producing device that meets the definition of 1.4G fireworks or 1.3G fireworks ... {remainder of text unchanged}.

HIGH-PILED COMBUSTIBLE STORAGE. Storage of combustible materials in closely packed piles or combustible materials on pallets, in racks or on shelves where the top of storage is greater than 12 feet (3658 mm) in height. When required by the Fire Code Official, high-piled combustible storage also includes certain high-hazard commodities, such as rubber tires, Group A plastics, flammable liquids, idle pallets and similar commodities, where the top of storage is greater than 6 feet (1829 mm) in height.

Any building exceeding 6,000 sq. ft. that has a clear height in excess of 14 feet, making it possible to be used for storage in excess of 12 feet, shall be considered to be high-piled storage. When a specific product cannot be identified, a fire protection system and life safety features shall be installed as for Class IV commodities, to the maximum storage height.

HIGH-RISE BUILDING. A building with an occupied floor or occupied roof located more than 55 feet above the lowest level of fire department vehicle access.

PERSON. A person, firm, partnership, corporation, association, or other entity.

REPAIR GARAGE. A building, structure, or portion thereof used for servicing or repairing motor vehicles. This occupancy shall also include garages involved in minor repair, modification, and servicing of motor vehicles for items such as lube changes, inspections, windshield repair or replacement, shocks, minor part replacement and other such minor repairs.

SELF-SERVICE STORAGE FACILITY. Real property designed and used to rent or lease individual storage spaces to customers to store and remove personal property on a self-service basis.

STANDBY PERSONNEL. Qualified fire service personnel approved by the Fire Code Official. When utilized, the number required shall be as directed by the Fire Code Official. Charges for utilization shall be as normally calculated by the jurisdiction.

UPGRADED OR REPLACED FIRE ALARM SYSTEM. A fire alarm system that is upgraded or replaced includes, but is not limited to the following:

- Replacing one single board or fire alarm control unit component with a newer model
- Installing a new fire alarm control unit in addition to or in place of an existing one
- Conversion from a horn system to an emergency voice/alarm communication system
- Conversion from a conventional system to one that utilizes addressable or analog devices

The following are not considered an upgrade or replacement:

- Firmware updates
- Software updates
- Replacing boards of the same model with chips utilizing the same or newer firmware
- (32) Section 203.2.3 is amended to read as follows:
 - **203.2.3.** Associated with Group E occupancies. A room or space used for assembly purposes that is associated with a Group E occupancy is not considered a separate occupancy, except when applying the assembly requirements of Chapter 10 and 11.
- (33) **Section 304.1.1** is hereby amended to read as follows:

304.1.1 Valet trash. Valet trash collection shall be permitted only where approved. The owner and valet collection service provider shall comply with the rules and limitations established by the jurisdiction. Refer to Appendix O for further information.

(34) **Section 307.1.1** is hereby amended to read as follows:

307.1.1 Prohibited open burning. Open Burning that is offensive or objectionable because of smoke emissions or when atmospheric conditions or local circumstances make such fires hazardous shall be prohibited.

Exception: {No change}

(35) **Section 307.2** is hereby amended to read as follows:

307.2 Permit Required. A permit shall be obtained from the Fire Code Official in accordance with Section 105.6 prior to kindling a fire for recognized silvicultural or range or wildlife management practices, prevention or control of disease or pests, or open burning. Application for such approval shall only be presented by and permits issued to the owner of the land upon which the fire is to be kindled.

Examples of state or local law, or regulations referenced elsewhere in this section may include but not be limited to the following:

- 1. Texas Commission on Environmental Quality (TCEQ) guidelines and/or restrictions.
- 2. State, County, or Local temporary or permanent bans on open burning.
- 3. Local written policies as established by the Fire Code Official.
- (36) **Section 307.3** is here by amended to read as follows:

307.3 Extinguishment Authority. When open burning creates or adds to a hazardous or objectionable situation, or a required permit for open burning has not been obtained, the Fire Code Official is authorized to order the extinguishment of the open burning operation by (i) the permit holder, (ii) another person responsible, or (iii) the fire department.

(37) Sections 307.4 and 307.4.1 are hereby amended to read as follows:

307.4 Location. The location for open burning shall not be less than 300 feet from any structure, and provisions shall be made to prevent the fire from spreading to within 300 feet of any structure.

Exceptions: {No change.}

- **307.4.1 Bonfires**. A bonfire shall not be conducted within 50 feet, or greater distance as determined by the Fire Code Official, of a structure or combustible material, unless the fire is contained in a barbecue pit. Conditions that could cause a fire to spread to within the required setback of a structure shall be eliminated prior to ignition.
- (38) **Section 307.4.3, Exceptions** is hereby amended to read as follows:

Exceptions:

- 1. Portable outdoor fireplaces used at one- and two-family dwellings.
- 2. Where buildings, balconies, and decks are protected by an approved automatic sprinkler system.
- (39) **Sections 307.4.4 and 307.4.5** are hereby amended to read as follows:
 - **307.4.4 Permanent Outdoor Firepit.** Permanently installed outdoor firepits for recreational fire purposes shall not be installed within 10 feet of a structure or combustible material.

Exception: Permanently installed outdoor fireplaces constructed in accordance with the International Residential Code or International Building Code.

- **307.4.5 Trench Burns**. Trench burns shall be conducted in air curtain trenches and in accordance with Section 307.2.
- (40) **Section 307.5** is hereby amended to read as follows:
 - **307.5 Attendance**. Open burning, trench burns, bonfires, recreational fires, and use of portable or permanent outdoor fireplaces or firepits shall be constantly attended until the... {Remainder of section unchanged}.
- (41) **Section 308.1.6, Exception #3** is hereby amended to read as follows:

Exceptions:

- 3. Torches or flame producing devices in accordance with Section 308.1.3 or 308.1.4.
- (42) **Section 308.1.7** is hereby amended to read as follows:
 - **308.1.7 Sky lanterns.** A person shall not release or cause to be released any unmanned free-floating devices containing an open flame or other heat source, such as but not limited to a sky lantern.
- (43) **Section 308.1.9** is hereby amended to read as follows:
 - **308.1.9 Aisles and exits.** Candles or open flames shall be prohibited in areas where occupants stand, or in an aisle or exit.
- (44) **Section 308.1** is hereby amended by adding Section 308.11 to read as follows:
 - **308.1.11 Open-flame cooking devices.** Open flame cooking devices shall comply with Section 4104.
- (45) **Section 311.5** is hereby amended to read as follows:
 - **311.5 Placards.** The Fire Code Official is authorized to require marking of any vacant or abandoned buildings or structures determined to be unsafe pursuant to Section 115 of this code relating to structural or interior hazards as required by Section 311.5.1 through 311.5.5.
- (46) **Section 314.4** is hereby amended to read as follows:
 - **314.4 Vehicles.** Electric, liquid-fueled vehicles, aircraft, boats, or other motor craft shall not be located indoors except as follows:
 - 1. The engine starting system is made inoperable, or ignition batteries are disconnected except where the Fire Code Official requires that the batteries remain connected to maintain safety features.
 - 2. Fuel in fuel tanks does not exceed any of the following:
 - 2.1. Class I, II and III liquid-fuel does not exceed one-quarter tank or 5 gallons, whichever is less.
 - 2.2. LP gas does not exceed one-quarter tank or 6.6 gallons, whichever is less.

- 2.3. CNG does not exceed one-quarter tank or 630 cubic feet, whichever is less.
- 2.4. Hydrogen does not exceed one-quarter tank or 2,000 cubic feet, whichever is less.
- 3. Fuel Tanks and fill openings are closed and sealed to prevent tampering.
- 4. Vehicle, aircraft, boats, or other motor craft equipment are not fueled and defueled within the building.
- 5. Electric vehicles shall not be charged inside buildings or other structures, other than where approved in parking garages, or unless otherwise approved by the Fire Code Official.
- (47) A new **Section 323** entitled Electric Vehicles is hereby adopted to read as follows:

Section 323: Electric Vehicles

- **323.1 Electric vehicle charging stations.** Electric vehicles (EV) charging stations shall not be located inside buildings and/or structures, except where approved for parking garage locations as per the National Electrical Code.
- **323.1.1 Charging stations inside parking garage.** EV charging stations located in parking garages shall be located at grade level along the exterior perimeter walls and shall be within 150 feet of fire apparatus access roadway, or shall be located on the top level of the garage with no roof or structure above.
- **323.1.2 Charging stations inside R-3 and R-4 occupancies.** Approved charging stations in the private garage shall have a listed heat alarm installed in the garage and interconnected to the smoke alarms inside the dwelling.
- **323.2 Disconnect.** Locations containing electrical vehicle charging stations shall be provided with a clearly identified and readily accessible emergency disconnect installed in an approved location.

The emergency disconnects for exterior electric vehicle charging stations shall be located within 100 feet of, but not less than 20 feet, from the charging stations, unless otherwise approved by the Fire Code Official.

- **323.2.1 Height.** The height of the emergency disconnect switch shall be not less than 42 inches and not more than 48 inches measured vertically, from the floor level to the activating button.
- **323.2.2 Emergency disconnect sign.** Emergency disconnect devices shall be distinctly labeled as "Emergency electric vehicle charger disconnect." Signs shall be placed in an approved location and shall consist of all of the following:
 - 1. White reflective background with red letters.
 - 2. Weather-resistant durable material.
 - 3. Lettering not less than 2 inches high.
 - 4. Permanently affixed to the building or structure in an approved manner.
- **323.3 Damaged electric vehicle batteries.** Damaged electric vehicle batteries shall not be stored inside any building or structure, unless approved by the by the Fire Code Official.
- (48) **Section 404.2.2** is hereby amended by adding **Number 4.10** to read as follows:
 - 4.10. Fire protection system controls
- (49) **Section 405.5** is hereby amended to read as follows:
 - **405.5 Time.** The Fire Code Official may require an evacuation drill at any time. Drills shall be held at unexpected times and under varying condition to simulate the unusual conditions that occur in case of fire.

Exceptions:

- 1. {No change.}
- 2. {No change.}
- Notification of teachers/staff having supervision of light- or sound-sensitive students/occupants, such as those on the autism spectrum, for the protection of those students/occupants, shall be allowed prior to conducting a drill.
- (50) **Section 501.4** is hereby amended to read as follows:
 - **501.4 Timing of Installation.** When fire apparatus access roads or a water supply for fire protection are required to be installed for any structure or development, they shall be installed, tested, and

approved prior to the time of which construction has progressed beyond completion of the foundation of any structure.

(51) **Section 503.1.1** is hereby amended to read as follows:

503.1.1 Buildings and facilities. Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet of all portions of the facility and all portions of the exterior walls of the first story of the building as measured from the center of the apparatus access road and by an approved route around the exterior of the building or facility.

Except for one- or two-family dwellings, the path of measurements shall be along a minimum of 10 feet wide, level (not exceeding 3 percent grade) and unobstructed pathway around the external walls of the structure.

Exceptions:

- The Fire Code Official is authorized to increase the dimensions of 150 feet where any of the following conditions occur.
 - 1.1 Where the building is equipped throughout with an approved automatic sprinkler system installed in accordance with Sections 903.3.1.1, 93.3.1.2, or 903.3.1.3, the distance may be increased to no more than 200 feet.

{remainder remains unchanged}

- (52) **Section 503.1** is hereby amended to add a new **Section 503.1.4** to read as follows:
 - **503.1.4 Two points of access.** A minimum two points of access shall be provided for each building, structure and subdivision. The two points of access shall be a minimum of 140 feet apart as measured edge of pavement to edge of pavement.
- (53) **Section 503.1** is hereby amended to add a new **Section 503.1.5** to read as follows:

503.1.5 Residential subdivisions. In residential subdivisions of detached one- and two-family dwellings, the maximum dead-end culde-sac length shall not exceed six hundred feet (600') as measured from the centerline of the intersecting street to the center point of the radius.

(54) **Section 503.2.1** is hereby amended to read as follows:

503.2.1 Dimensions. Fire Apparatus access roads shall have an unobstructed width of not less than 24 feet, exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 14 feet.

Exception: Vertical clearance may be reduced provided such reduction does not impair access by fire apparatus and approved signs are installed and maintained indicating the established vertical clearance when approved.

(55) **Section 503.2.2** is hereby amended to read as follows:

503.2.2 Authority. The Fire Code Official shall have the authority to require an increase in the minimum access widths and vertical clearances where they are inadequate for fire or rescue operations or where necessary to meet the public safety objectives of the jurisdiction.

(56) **Section 503.2.3** is hereby amended to read as follows:

503.2.3 Surface. Fire apparatus access roads shall be designed and maintained to support imposed loads of 85,000 Lbs. for fire apparatus and shall be surfaced so as to provide all-weather driving capabilities.

Fire apparatus roads shall be designed, constructed, and maintained in accordance with the City of McKinney Engineering Department Construction Standard Detail and Design Manual.

(57) **Section 503.2.4** is hereby amended to read as follows:

503.2.4 Turning radius. The required turning radius of a fire apparatus access road shall be in accordance with this section.

Any such fire lane shall either connect both ends to a dedicated public street or fire lane or be provided with an approved turnaround having a minimum outer radius of fifty feet (50'). If two or more interconnecting lanes are provided, interior radius for that connection shall be required in accordance with the following:

- 1. 24-foot fire lane minimum radius 30 feet; or
- 2. 26-foot fire lane minimum radius 30 feet; or
- 3. 30-foot fire lane minimum radius 20 feet.

Intersections of fire lanes and/or other fire apparatus access roads of dissimilar widths shall utilize the radius required for the fire lane with the smallest width.

- (58) **Section 503.2.5** is hereby amended by adding new **Sections 503.2.5.1** and **503.2.5.2** to read as follows:
 - **503.2.5.1 Termination.** Dead end fire apparatus access roads shall not terminate in a continuous drive aisle or where otherwise prohibited by the Fire Code Official.
 - **503.2.5.2 Residential Subdivisions.** Dead-end fire apparatus access roads within residential subdivisions shall be provided with an approved turn-around when such roads provide street frontage or emergency access to lots.
- (59) **Section 503.2.7** is hereby amended to read as follows:
 - **503.2.7 Grade**. The grade of the fire apparatus access road shall not exceed the following:
 - 1. Along the fire apparatus access road six percent (6%)
 - 2. Cross slope five percent (5%)

Exception: The Fire Code Official shall have the authority to approve the maximum grade to no greater than nine percent (9%) along the fire apparatus access road due to general topography and the hazard being protected.

- (60) **Section 503.2.8** is hereby amended to read as follows:
 - **503.2.8** Angles of approach and departure. The angles of approach and departure for fire apparatus access roads shall not exceed five percent (5%).

Exception: The Fire Code Official shall have the authority to approve adjusting the maximum grade to no greater than nine percent (9%) due to general topography and the hazard being protected.

- (61) **Section 503.2** is hereby amended by adding a new **Section 503.2.9** read as follows:
 - **503.2.9 Public Roads.** Where approved by the Fire Code Official, public roads may be used to supplement hose lay measurement requirements where the following conditions are met.
 - 1. Building set back from road does not exceed 30 feet.
 - 2. City of McKinney Engineering Master Thoroughfare Plan roadway design speed does not exceed 40 MPH.
 - 3. An internal fire lane is also provided.
 - 4. No obstructions to the hose lay path from the public way to the structure.
- (62) Section 503.3 is hereby amended to read as follows:
 - **503.3 Marking**. Striping, signs, or other markings, when approved by the Fire Code Official, shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. Striping, signs, and other markings shall be maintained in a clean and legible condition at all times and shall be replaced or repaired when necessary to provide adequate visibility.
 - 1. Striping. Fire apparatus access roads shall be continuously marked by painted lines of red traffic paint six inches (6") in width to show the boundaries of the lane. The words "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" shall appear in four inch (4") white letters at 25 feet intervals on the red border markings along both sides of the fire lanes. Where a curb is available, the striping shall be on the vertical face of the curb.
 - 2. **Signs.** Signs shall read "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" and shall be 12" wide and 18" high. Signs shall be painted on a white background with letters and borders in red, using not less than 2" lettering. Signs shall be permanently affixed to a stationary post and the bottom of the sign shall be six feet, six inches (6'-6") above finished grade. Signs shall be spaced not more than fifty feet (50') apart along both sides of the fire lane. Signs may be installed on permanent buildings or walls or as approved by the Fire Chief.
- (63) **Section 503.3**, as amended, is further amended by adding **Item #3** to read as follows:

- 3. Notwithstanding the foregoing, the area in question is presumed to be a fire apparatus access road if it has striping, signage, or markings sufficient to put a reasonable person on notice that the area is a fire apparatus access road.
- (64) **Section 503.4** is hereby amended to read as follows:

503.4 Obstruction of fire apparatus access roads.

- Fire apparatus access roads shall not be obstructed in any manner, including the parking or standing of vehicles, whether attended or unattended, or by the placement of equipment, materials, or other objects, for any period of time.
- 2. The minimum widths and clearances established in Sections 503.2.1 and 503.2.2, and any area marked as a fire lane as described in Section 503.3, shall be maintained at all times.
- 3. The Fire Chief, Police Chief, and their designated representatives are authorized to remove, or cause to be removed, any material, vehicle, or object obstructing a fire apparatus access road, at the expense of the owner of such material, vehicle, or object.
- 4. For purposes of enforcement, the following parties may be issued a citation for non-compliance and shall be presumed to be violators and may be held jointly and severally liable for any obstruction of fire apparatus access roads:
 - 4.1 The registered owner of a vehicle parked or standing in a fire apparatus access road.
 - 4.2 Persons in charge of a construction project such as, but not limited to, General Contractors.
 - 4.3 Any person, firm, partnership, corporation, association, or other entity that owns, has custody of, or exercises actual or apparent control over equipment, materials, or objects obstructing the fire apparatus access road, and
 - 4.4 The owner, occupant, or leaseholder of the property or business directly adjacent to the obstructed portion of the fire apparatus access road.
- (65) **Section 503.6** is hereby amended by adding a new sentence after the first paragraph to read as follows:

- **503.6 Security Gates**. {*Existing text remains unchanged*}. Gates across a fire lane road shall meet the design criteria in accordance with the MFD-FMO Gate Access Control Guide.
- (66) Section 503 is hereby amended by adding a new Section 503.8 and Section 503.8.1 to read as follows.
 - **503.8 Legal easement.** During the platting process, fire apparatus access roads shall be identified as a "fire lane easement" and shall match the site plan. Where fire apparatus roads are provided and a plat is not required, the limits of the fire lane easement shall be shown on a site plan and placed on permanent file with the Fire Code Official and planning department.
 - **503.8.1 Abandonment.** No owner or person in charge of any premise served by a fire lane or access easement shall abandon, restrict, modify, or close any fire lane or easement without first securing from the City of McKinney approval of an amended plat or other acceptable legal instrument showing the abandoning/removal of the fire lane easement.
- (67) **Section 504** is hereby amended by adding a new Section 504.4 to read as follows:
 - **504.4.** Buildings with enclosed interior courtyards. New buildings with enclosed interior courtyards shall have a straight/direct access corridor from the exterior to the courtyard at a location acceptable to the Fire Code Official. The corridor shall comply with Section 1020. The access shall have a minimum width of 4 feet directly from the exterior to the courtyard without obstructions. The access door shall be marked at the street as "Direct access to courtyard".
- (68) **Section 505.1** is hereby amended to read as follows:
 - **505.1 Address Identification.** New and existing buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property.

Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than <u>6</u> inches high with a minimum stroke width of 1/2 inch.

Where required by the Fire Code Official, address numbers shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road, buildings do not immediately front a street, and/or the building cannot be viewed from the public way, a monument, pole, or other sign with approved 6-inch height building numerals or addresses and 4-inch height suite/apartment numerals of a color contrasting with the background of the building or other approved means shall be used to identify the structure. Address identification shall be maintained.

Exception: R-3 Single Family occupancies shall have approved numerals of a minimum 3 ½ inches in height and a color contrasting with the background clearly visible and legible from the street fronting the property and rear alleyway where such alleyway exists.

(69) **Section 505** is hereby amended by adding a new **Section 505.3** to read as follows:

505.3 Wayfaring sign. A wayfaring sign shall be provided for all new and existing multi-building developments in which multiple buildings are addressed with a single street address, such as in an apartment complex, or when the nature and arrangement of the buildings, such signage would be conducive to navigation. Such signs shall be placed at all points of entry to the development, or as required by the Fire Code Official. Location, construction, and type of signage shall be reviewed and approved by the Fire Code Official prior to installation.

The wayfaring sign shall meet the below minimum requirements:

- 1. Provide a simplified site plan layout of the development or property.
- 2. Shall indicate all entry and exit points.
- 3. Shall be a minimum of 36-inches by 36-inches.
- 4. Shall be provided with lighting or reflective sheeting.
- 5. Shall be permanently mounted.
- 6. Shall indicate major buildings and/or address numbers.
- 7. Shall indicate the development's name and address.

- 8. Shall be constructed of outdoor, weather-resistant material.
- (70) **Section 506.1** is hereby amended by adding a new **Section 506.1.3** to read as follows:

506.1.3 Where required. Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life saving or firefighting purposes, the Fire Code Official is authorized to require a key box to be installed in an approved location. The key box shall be of a type and location in accordance with the MFD-FMO Knox® Access Systems Guide.

(71) **Section 507.4** is hereby amended to read as follows:

507.4 Water Supply Test Date and Information. The water supply test used for hydraulic calculation of fire protection systems shall be conducted in accordance with NFPA 291, "Recommended Practice for Fire Flow Testing and Marking of Hydrants," and within one year of sprinkler plan submittal. The Fire Code Official shall be notified prior to the water supply test. Water supply tests shall be witnessed by the Fire Code Official, as required. The exact location of the static/residual hydrant and the flow hydrant shall be indicated on the design drawings. All fire protection plan submittals shall be accompanied by a hard copy of the waterflow test report, or as approved by the Fire Code Official. The report must indicate the dominant water tank level at the time of the test and the maximum and minimum operating levels of the tank, as well, or identify applicable water supply fluctuation. The licensed contractor must then design the fire protection system based on this fluctuation information, as per Section 903.3.5 and the applicable referenced NFPA standard. Reference Section 903.3.5 for additional design requirements.

Exception: This exception is only applicable to the NFPA 291 fire hydrant flow test above. Water supply test information may be provided by the water authority via hydraulic water model where approved by the Fire Code Official. The water model report shall include the exact location of the water model node on the city's water supply piping, elevation, water supply fluctuation information, and all other pertinent water supply test information for fire protection design, as applicable.

Water supply test shall be in accordance with the MFD-FMO Flow Test Guide.

(72) **Section 507.5.4** is hereby amended to read as follows:

507.5.4 Obstruction. Unobstructed access to fire hydrants shall be maintained at all times. Posts, fences, vehicles, growth, trash, storage and other materials or objects shall not be placed or kept near fire hydrants, fire department inlet connections or fire protection system control valves in a manner that would prevent such equipment or fire hydrants from being immediately discernible and/or accessible. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants.

(73) **Section 509.1** is hereby amended by adding a new **Section 509.1.2** to read as follows:

509.1.2 Sign Requirements. The construction and design of signs required by this code shall comply with the MFD-FMO Sign Guide. All required signage shall be approved by the Fire Code Official prior to installation.

(74) **Section 510.6.** is hereby amended by adding a paragraph to read as follows:

The inspecting radio contractor shall provide an annual inspection tag/sticker on the ERCES' BDA and any remote annunciator. Tag/sticker shall identify approved inspecting contractor's name, physical address, phone number, and FCC license number, and inspector's name, as well as the date of inspection. System shall not be tagged until all inspection requirements of this section are conducted. Tag/sticker shall be blue in color for a passing system. If this is not possible for any reason, tag/sticker shall be red in color for a failing system with reasons for failure indicated on the tag if possible. If red tag/sticker is placed, AHJ/Fire Marshal shall be notified within a maximum of 24 hours.

(75) Section 604.1 is hereby amended to add Section 604.1.1

604.1.1 Elevator car to accommodate ambulance stretcher.

Where elevators are provided, not fewer than one elevator shall be provided, per elevator bank, for fire department emergency access to all floors. The elevator car shall be of such size and arrangement to accommodate an ambulance stretcher 24 inches by 84 inches, with not less than 5-inch radius corners, in the horizontal, open position and shall be identified by the international symbol for emergency medical services (star of life). The symbol shall be not

less than 3 inches in height and shall be placed inside on both sides of the hoistway door frame.

Where elevators are installed the elevator or not less than one elevator per bank, shall be provided for fire department emergency access to all floors.

The EMS elevator car shall be of such size and arrangement to accommodate an ambulance stretcher 24 inches by 84 inches with not less than 5-inch radius corners, in the horizontal, open position.

The EMS Elevator shall be identified by the international symbol for emergency medical services (star of life). The symbol shall be not less than 3 inches in height and shall be placed inside on both sides of the hoist way door frame on all floors.

- (76) **Section 604.7** is hereby amended to read as follows:
 - **604.7 Storage.** Storage is prohibited in elevator cars or elevator machine rooms. Signage shall be provided at the entry doors to the elevator machine room indicating "Elevator Machinery No Storage Allowed."
- (77) **Sections 605.4 through 605.4.2.2** are hereby amended to read as follows:
 - **605.4 Fuel oil storage systems**. Fuel oil storage systems for building heating systems shall be installed and maintained in accordance with this code. Tanks and fuel-oil piping systems shall be installed in accordance with Chapter 13 of the *International Mechanical Code* and Chapter 57 of the *International Fire Code*.
 - **605.4.1 Fuel oil storage in outside, above-ground tanks**. Where connected to a fuel-oil piping system, the maximum amount of fuel oil storage allowed outside above ground without additional protection shall be 660 gallons (2498 L). The storage of fuel oil above ground in quantities exceeding 660 gallons (2498 L) shall comply with NFPA 31 and Chapter 57 of the *International Fire Code*.
 - **605.4.1.1 Approval.** Outdoor fuel oil storage tanks shall be in accordance with UL 80, UL 142, UL 142A, or UL 2085, and also listed as double wall/secondary containment tanks.
 - **605.4.2 Fuel oil storage inside buildings.** Fuel oil storage inside buildings shall comply with Sections 605.4.2.1 through 605.4.2.8 and Chapter 57 of the *International Fire Code*.

- **605.4.2.1 Approval.** Indoor fuel oil storage tanks shall be in accordance with UL80, UL 142 or UL 2085, and also listed as a double wall/secondary containment tank for Class II liquids.
- **605.4.2.2 Quantity limits.** One or more fuel oil storage tanks containing Class II or III combustible liquid shall be permitted in a building. The aggregate capacity of all tanks shall not exceed the following:
- 660 gallons (2498 L) in unsprinklered buildings, where stored in a tank complying with UL 80, UL 142, UL 142A, or UL 2085, and also listed as a double wall/secondary containment tank for Class II liquids, and the secondary containment shall be monitored visually or automatically.
- 1,320 gallons (4996 L) in buildings equipped with an automatic sprinkler system in accordance with Section 903.3.1.1, where stored in a tank complying with UL 142, UL 142A, or UL 2085. The tank shall be listed as a secondary containment tank, and the secondary containment shall be monitored visually or automatically.
- 3. 3,000 gallons (11 356 L) in buildings equipped with an automatic sprinkler system in accordance with Section 903.3.1.1, where stored in protected above-ground tanks complying with UL 2085 and Section 5704.2.9.7. The tank shall be listed as a secondary containment tank, as required by UL 2085, and the secondary containment shall be monitored visually or automatically.
- (78) **Section 807.5.2.2** is hereby amended to read as follows:
 - **807.5.2.2 Artwork in Corridors**. Artwork and teaching materials shall be limited on the walls of corridors to not more than 20 percent of the wall area. Such materials shall not be continuous from floor to ceiling or wall to wall. Curtains, draperies, wall hangings, and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

Exception: Corridors protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be limited to 50 percent of the wall area.

(79) **Section 807.5.2.3** is hereby amended to read as follows:

807.5.2.3 Artwork in Classrooms. Artwork and teaching materials shall be limited on walls of classrooms to not more than 50 percent of the specific wall area to which they are attached. Curtains, draperies, wall hangings and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

(80) **Section 807.5.5.2** is hereby amended to read as follows:

807.5.5.2 Artwork in corridors. Artwork and teaching materials shall be limited on the walls of corridors to not more than 20 percent of the wall area. Such materials shall not be continuous from floor to ceiling or wall to wall. Curtains, draperies, wall hangings and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

Exception: Corridors protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be limited to 50 percent of the wall area.

(81) Section 807.5.5.3 is hereby amended to read as follows:

807.5.5.3 Artwork in Classrooms. Artwork and teaching materials shall be limited on walls of classrooms to not more than 50 percent of the specific wall area to which they are attached. Curtains, draperies, wall hangings and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

(82) **Section 901.4.7** is hereby amended by adding the following paragraph at the end of the current language to read as follows:

901.4.7. Pump and Riser room size. {Current text inserted without change.}

Minimum riser room size shall be 36 sq. ft., with the minimum dimension being 6 ft.

(83) **Section 901.4.7.1** is hereby amended to read as follows:

901.4.7.1 Access. Automatic sprinkler system risers, fire pumps and controllers shall be provided with ready access.

- 1. Where located in a fire pump room or automatic sprinkler system riser room, the door shall be permitted to be locked provided that the key is available at all times.
- 2. Fire pump and automatic sprinkler system riser rooms shall be directly accessible from the exterior of the structure.
- 3. Access doors shall be a minimum of 3 feet (3') in width and six-feet eight-inches (6'8") in height.
- 4. A 3-foot clear aisle shall be maintained from the riser room door to any fire protection and life safety equipment.

Equipment, including piping, shall not obstruct full access into the room or the full swing of the door

- (84) **Section 901.4.7** is hereby amended by adding a new **Section 901.4.7.2** to read as follows:
 - **901.4.7.2** Fire protection equipment only. Fire pump and automatic sprinkler system riser rooms shall be limited to equipment that is intended for fire protection and operations.
- (85) **Section 901.5** is hereby amended by adding the following paragraph to the end of the current provision read as follows:
 - **901.5 Installation acceptance testing**. {Current text inserted without change.}

All required tests shall be conducted by and at the expense of the owner or his representative. The Fire Department shall not be held responsible for any damages incurred in such test. Where it is required that the Fire Department witness any such test, such test shall be scheduled with a minimum of 48-hour notice to the Fire Chief or his representative.

- (86) **Section 901.6.1** is hereby amended by adding a new **Section 901.6.1.1** to read as follows:
 - **901.6.1.1 Standpipe testing**. Building owners/managers must maintain and test standpipe systems as per NFPA 25 requirements. The following additional requirements shall be applied to the testing that is required every 5 years:
 - 1. The piping between the Fire Department Connection (FDC) and the standpipe shall be hydrostatically tested for all FDC's on any

- type of standpipe system. Hydrostatic testing shall also be conducted in accordance with NFPA 25 requirements for the different type of standpipe systems.
- 2. For any manual (wet or dry) standpipe system not having an automatic water supply capable of flowing water through the standpipe, the tester shall connect hose from a fire hydrant or portable pumping system (as approved by the Fire Code Official) to each FDC, and flow water through the standpipe system to the roof outlet to verify that each inlet connection functions properly. Confirm that there are no open hose valves prior to introducing water into a dry standpipe. There are no required pressure criteria at the outlet. Verify that check valves function properly and that there are no closed control valves on the system.
- Any pressure relief, reducing or control calves shall be tested in accordance with the requirements of NFPA 25. All hose valves shall be exercised.
- 4. If the FDC is not already provided with approved caps, the contractor shall install such caps for all FDC's as required by the Fire Code Official.
- 5. Upon successful completion of standpipe test, place a blue tag (as per Texas Administrative Code, Fire Sprinkler Rules for Inspection, Test and Maintenance Service (ITM) Tag) at the bottom of each standpipe riser in the building. The tag shall be check-marked as "Fifth-Year" for Type ITM, and the note on the back of the tag shall read "5-year Standpipe Test" at a minimum.
- 6. The procedures required by Texas Administrative code Fire Sprinkler Rules with regard to Yellow Tag and Red Tags or any deficiencies noted during the testing, including the required notification of the local Authority Having Jurisdiction (Fire Code Official) shall be followed.
- 7. Additionally, records or the testing shall be maintained by the owner and contractor, if applicable, as required by the State Rules mentioned above and NFPA 25.
- 8. Standpipe system tests where water will be flowed external to the building shall not be conducted during freezing conditions or during the day prior to expected nighttime freezing conditions.
- 9. Contact the Fire Code Official for request to remove existing fire hose from Class II and III standpipe systems where employees

are not trained in the utilization of this firefighting equipment. All standpipe hose valves must remain in place and be provided with an approved cap and chain when approval is given to remove hose by the Fire Code Official.

- (87) **Section 901.6** is hereby amended by adding a new **Section 901.6.4** to read as follows:
 - **901.6.4 False alarms and nuisance alarms**. False alarms and nuisance alarms shall not be given, signaled, or transmitted or caused or permitted to be given, signaled, or transmitted in any manner.
- (88) **Section 901.7** is hereby amended to read as follows:
 - **901.7 Systems out of service**. Where a required fire protection system is out of service or in the event of an excessive number of activations, the fire department and Fire Code Official shall be notified immediately and, where required by the Code Official, the building shall either be evacuated, or an approved fire watch shall be provided for all occupants left unprotected by the shutdown until the fire protection system has been returned to service.

Where utilized, fire watches shall be provided with not less than one approved means for notification of the fire department and their only duty shall be to perform constant patrols of the protected premises and keep watch for fires.

Exception: Facilities with an approved notification and impairment program. The notification and impairment program for water-based fire protection systems shall comply with NFPA 25.

- (89) **Section 903.1.1** is hereby amended to read as follows:
 - **903.1.1 Alternative protection**. Alternative automatic fire-extinguishing systems complying with Section 904 shall be permitted in addition to automatic sprinkler protection where recognized by the applicable standards or as approved by the Fire Code Official.
- (90) **Section 903.2** is hereby amended by adding a paragraph after the existing provision and deleting the exception to read as follows:
 - **903.2 Where required**. Approved automatic fire sprinkler systems in new buildings and structures shall be provided in the locations described in Sections 903.2.1 through 903.2.12.

Automatic sprinklers shall not be installed in elevator machine rooms, elevator machine spaces, and elevator hoistways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances.

Exemption: {deleted}

- (91) **Section 903.2.2.1** is hereby amended to read as follows:
 - **903.2.2.1 Ambulatory care facilities.** An automatic sprinkler system shall be installed throughout the entire floor containing an ambulatory care facility where either of the following conditions exist at any time:
 - 1. Four or more care recipients that are incapable of self-preservation.
 - 2. One or more care recipients that are incapable of selfpreservation are located at other than the level of exit discharge serving such facility.

In buildings where ambulatory care is provided on levels other than the level of exit discharge, an automatic sprinkler system shall be installed throughout the entire floor as well as all floors below where such care is provided, and all floors between the level of ambulatory care and the nearest level of exit discharge, the level of exit discharge, and all floors below the level of exit discharge.

Exception: Unless otherwise required by this code, floors classified as an open parking garage are not required to be sprinklered.

- (92) **Section 903.2.4.2** is hereby amended to read as follows:
 - **903.2.4.2 Group F-1 distilled spirits.** An automatic sprinkler system shall be provided throughout a Group F-1 fire area used for the manufacture of distilled spirits involving more than 120 gallons of distilled spirits (>20% alcohol) in the fire area at any one time.
- (93) **Section 903.2.8** is hereby amended to read as follows:
 - **903.2.8 Group** R. An automatic sprinkler system installed in accordance with Section 903.3 shall be installed throughout all buildings with a Group R fire area, including townhomes and single-family built-for-rent developments.

- (94) **Section 903.2.8** is hereby amended by adding a new **Section 903.2.8.5** to read as follows:
 - **903.2.8.5 Storage rooms**. Within Group R occupancies, storage areas that are leased or rented shall comply with Section 903.2.9.5.
- (95) **Section 903.2.9.3** is hereby amended to read as follows:
 - **903.2.9.3 Group S-1 distilled spirits or wine.** An automatic sprinkler system shall be provided throughout a Group S-1 fire area used for the bulk storage of distilled spirits involving more than 120 gallons of distilled spirits or wine (>20% alcohol) in the fire area at any one time.
- (96) **Section 903.2.9.4** is hereby amended by deleting the Exception.
- (97) **Section 903.2.9** is hereby amended by adding a new **Section 903.2.9.5** to read as follows:
 - 903.2.9.5 Self-Service Storage Facility. An automatic sprinkler system shall be installed throughout all self-service storage facilities. The minimum sprinkler system design shall be based on an Ordinary Hazard Group II classification, in accordance with NFPA 13 requirements. Physical construction in compliance with open-grid ceilings as per NFPA 13, such as an open metal grid ceiling or chicken wire that does not obstruct the overhead sprinkler protection, shall be installed to prevent storage from exceeding the lower of either 12 feet above finished floor or 18 inches beneath standard sprinkler head deflectors. At least one sprinkler head shall be provided in each storage unit/room (additional sprinklers may be necessary for compliance with NFPA 13 spacing requirements), regardless of wall height or construction type separating such units.
- (98) **Section 903.2.11.3** is hereby amended to read as follows:
 - **903.2.11.3 Buildings 35 feet or more in height**. An automatic sprinkler system shall be installed throughout buildings that have one or more stories, other than penthouses in compliance with Section 1511 of the International Building Code, located 35 feet or more above the lowest level of fire department vehicle access, measured to the finished floor.

Exception: {deleted}

(99) **Section 903.2.11** is hereby amended by adding new **Sections 903.2.11.7 through 903.2.11.9** to read as follows:

903.2.11.7 High-Piled Combustible Storage. For any building with a clear height exceeding 12 feet, see Chapter 32 to determine if those provisions apply.

903.2.11.8 Spray booths and rooms. New and existing spray booths and spraying rooms shall be protected by an approved automatic sprinkler system and/or an approved automatic fire extinguishing system.

903.2.11.9 Buildings over 6,000 sq. ft. An automatic sprinkler system shall be installed throughout all buildings with a building area over 6,000 sq. ft. For the purpose of this provision, fire walls shall not define separate buildings.

Exception: Open parking garages complying with 903.2.10.

(100) **Section 903.3.1** is hereby amended to read as follows:

903.3.1 Standards.

Automatic sprinkler systems shall be designed and installed in accordance with Section 903.3.1.1 unless otherwise permitted by Sections 903.3.1.2 and 903.3.1.3 and other chapters of this code, as applicable.

For any structure or building, for which a specific use, lease, or tenant cannot be identified, such as a speculative retail or office building, the sprinkler system shall be designed to Ordinary Hazard Group II, or as permitted by the Fire Code Official.

For any structure or building with a clear height in excess of 12 feet, the sprinkler system shall be designed to provide a minimum of Ordinary Hazard Group II.

For any structure or building with a clear height in excess of 12 feet, and with a primary use of storage or warehouse, the sprinkler system shall be designed to protect Class IV Commodities to the maximum storage height.

Exception: If a commodity type and storage height can be determined, the sprinkler system shall be designed according to the approved commodity class and storage height.

(101) **Section 903.3.1.1.1** is hereby amended to read as follows:

- **903.3.1.1.1 Exempt locations**. When approved by the Fire Code Official, automatic sprinklers shall not be required in the following rooms or areas where such . . . {bulk of section unchanged} . . . because it is damp, of fire-resistance-rated construction or contains electrical equipment.
- Any room where sprinklers constitute a serious life or fire hazard because of the nature of the contents, where approved by the Fire Code Official.
- Generator and transformer room, under the direct control of a public utility, separated from the remainder of the building by walls and floor/ceiling or roof ceiling assemblies having a fireresistance rating of not less than 2 hours.
- 3. Elevator machine rooms, machinery spaces and hoistways, other than pits where sprinklers would not necessitate shunt trip requirements under any circumstances.
- (102) **Section 903.3.1.1** is hereby amended by adding a new **Section 903.3.1.1.4** to read as follows:
 - **903.3.1.1.4 Dry pipe sprinkler systems.** Dry pipe sprinkler systems protecting fire areas of Type V construction shall be required to meet the 60 second water delivery time, per NFPA 13, to the system test connection regardless of the system size, unless more stringent criteria are applicable in NFPA 13, and all dry pipe sprinkler systems shall be trip tested to flow/discharge water to verify compliance with this requirement, unless otherwise approved by the Fire Code Official.
- (103) **Section 903.3.1.1** is hereby amended by adding a new **Section 903.3.1.1.5** to read as follows:
 - **903.3.1.1.5 Residential systems**. Group R occupancies exceeding the maximum allowable factors in Chapter 5 of the International Fire Code, shall install an automatic fire sprinkler system shall be installed in accordance with 903.3.1.1.
- (104) **Section 903.3.1.2.2** is hereby amended to read as follows:
 - **903.3.1.2.2 Corridors and balconies**. Sprinkler protection shall be provided in all corridors and for all balconies. { *delete the remainder of paragraph and section*}
- (105) **Section 903.3.1.2.3** is hereby amended to read as follows:

- **903.3.1.2.3 Attached garages and attics**. Sprinkler protection is required in attached garages and in the following attic spaces:
- 1. Attics that are used or intended for living purposes or storage shall be protected by an automatic sprinkler system.
- 2. Where fuel-fired equipment is installed in an unsprinklered attic, not fewer than one quick response intermediate temperature sprinkler shall be installed above the equipment.
- 3. Attic spaces of buildings that are two or more stories in height above grade plane or above the lowest level of fire department vehicle access.
- 4. Group R-4, Condition 2 occupancy attics not required by Item 1 or 3 to have sprinklers shall comply with one of the following:
 - 4.1 Provide automatic sprinkler system protection.
 - 4.2 Provide a heat detection system through the attic that is arranged to activate the building fire alarm system.
 - 4.3 Construct the attic using noncombustible materials.
 - 4.4 Construct the attic using fire-retardant-treated wood complying with Section 2303.2 of the International Building Code.
 - 4.5 Fill the attic with noncombustible insulation.
- (106) **Section 903.3.1.3** is hereby amended to read as follows:
 - **903.3.1.3 NFPA 13D systems**. Automatic sprinkler systems installed in one- and two-family dwellings; Group R-3; Group R-4, Condition 1; and townhouses shall be permitted to be installed throughout in accordance with NFPA 13D or in accordance with state law.
- (107) **Section 903.3.1.3** is hereby amended by adding an exception to read as follows:

Exception: Garages shall be protected when a living space or portion thereof is provided above.

- (108) **Section 903.3.1** is hereby amended by adding a new **Section 903.3.1.4** and new **Sections 903.3.1.4.1** through **903.3.1.4.2** to read as follows:
 - **903.3.1.4 Freeze protection**. Freeze protection systems for automatic fire sprinkler systems shall be in accordance with the requirements of the applicable referenced NFPA standard and this section.
 - **903.3.1.4.1 Attics**. Only dry-pipe, pre-action, or listed antifreeze automatic fire sprinkler systems shall be allowed to protect attic spaces.

Exception: Wet-pipe fire sprinkler systems shall be allowed to protect non-ventilated attic spaces where:

- The attic sprinklers are supplied by a separate floor control valve assembly to allow ease of draining the attic system without impairing sprinklers throughout the rest of the building, and
- 2. Adequate heat shall be provided for freeze protection as per the applicable referenced NFPA standard, and
- 3. The attic space is a part of the building's thermal, or heat, envelope, such that insulation is provided at the roof deck, rather than at the ceiling level.
- **903.3.1.4.2 Heat trace/insulation**. Heat trace/insulation shall only be allowed where approved by the Fire Code Official for small sections of large diameter water-filled pipe.
- (109) **Section 903.3.1.4** is here by amended by adding **Section 903.3.1.4.3** to read as follows:
 - **903.3.1.4.3 Water-filled piping**. Water-filled piping shall not be permitted to be installed in areas where the temperature is less than 40°F (4°C) unless approved by the Fire Code Official.
- (110) **Section 903.3.5** is hereby amended by adding a second paragraph immediately following the current paragraph to read as follows:

{Existing text to remain unchanged.}

Water supply as required for such systems shall be provided in conformance with the supply requirements of the respective NFPA

standards; however, every water-based fire protection system shall be designed with a 10-psi safety factor.

(111) **Section 903.3.9** is hereby amended to read as follows:

903.3.9 Building floor control valves. Approved supervised indicating valves shall be provided at the point of connection to the riser as indicated below.

- In high rise buildings, floor control assemblies shall be located in protected stairwells, or as otherwise approved by the Code Official.
- 2. In all other buildings, floor control assemblies shall be located as approved by the Fire Code Official.
- (112) **Section 903.4.1** is hereby amended by adding a second paragraph immediately after the existing paragraph to read as follows:

{Existing text to remain unchanged.}

Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe systems, including accessible backflow preventers; and, except for fire department hose connection valves shall be electrically supervised to initiate a supervisory signal at the central station upon tampering.

(113) **Section 903.4.3** is hereby amended by adding a second paragraph immediately following the current paragraph to read as follows:

{Existing text to remain unchanged.}

The alarm device required on the exterior of the building shall be a weatherproof horn/strobe notification appliance with a minimum 75 candela strobe rating, installed as close as practicable to the fire department connection.

- (114) **Section 903** is hereby amended by adding a new **Section 903.7** to read as follows:
 - **903.7 Site Map.** A laminated map of the fire protection system; including valve shutoffs, isolation valves, low point/auxiliary drains, and any other information deemed necessary by the Fire Code Official, shall be provided in the riser room. The minimum map size

- shall be 24"x24". A larger map may be deemed necessary by the Fire Code Official.
- (115) **Section 904.14.5** is hereby amended by adding a new **Section 904.14.5.4** to read as follows:
 - **904.14.5.4 Protective covers for discharge nozzles**. Discharge nozzles located between the cooking surface and hood filters shall be provided with approved metal protective covers.
- (116) **Section 905.2** is hereby amended by adding a new **Section 905.2.1** to read as follows:
 - **905.2.1 Automatic supply**. Where standpipes are required, an automatic supply shall be provided for the following occupancies/buildings:
 - 1. Buildings defined as high-rise
 - 2. H Occupancies
 - 3. High-piled storage permitted occupancies
 - 4. Hazardous materials permitted occupancies
- (117) **Section 905.3** is hereby amended by adding new **Section 905.3.8** to read as follows:
 - **905.3.8. Buildings exceeding 10,000 sq. ft.** In buildings exceeding 10,000 square feet in area per story–and where any portion of the building's interior area is more than 200 feet of travel, vertically and horizontally, from the nearest point of fire department vehicle access, Class I standpipes shall be provided.
- (118) **Section 905.4** is hereby amended to read as follows:
 - **905.4 Location of Class I standpipe hose connections**. Class I standpipe hose connections shall be provided in all of the following locations:
 - 1. {No change}
 - 2. {No change}
 - 3. {No change}
 - 4. {No change}
 - 5. Where the roof has a slope less than four (4) units vertical in 12 units horizontal (33.3-percent slope), each standpipe shall be provided with a two-way hose connection located to serve the roof or at the highest landing of an interior exit stairway

- with stair access to the roof provided in accordance with Section 1011.12.
- 6. {No change}
- 7. When required by this Chapter, standpipe connections shall be placed adjacent to all required exits to the structure and at two hundred feet (200') intervals along major corridors thereafter, or as otherwise approved by the Fire Code Official.
- (119) Section 905.8 is hereby amended to read as follows:
 - 905.8 Dry standpipes. Dry standpipes shall not be installed.

Exception: Where subject to freezing and in accordance with NFPA 14. Additionally, manual dry standpipe systems shall be supervised with a minimum of 10 psi and a maximum of 40 psi air pressure with a high/low supervisory alarm.

(120) **Section 905.9** is hereby amended by adding a second paragraph after the exceptions to read as follows:

{Existing text to remain unchanged.}

Exception: {No change.}

Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe systems except for fire department hose connection valves shall be electrically supervised to initiate a supervisory signal at the central station upon tampering.

- (121) **Section 906.1(1)** is hereby amended by deleting Exception 3.
- (122) **Section 907.1** is hereby amended by adding a new **Section 907.1.4** to read as follows:
 - **907.1.4 Design standards.** Where a new or replacement fire alarm system is installed, the devices shall be addressable.
- (123) **Section 907.2.1** is hereby amended to read as follows:
 - **907.2.1 Group A**. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group A occupancies having an occupant load of 300 or more persons or where the occupant load is more than 100 persons above or below the lowest level of exit discharge. Group A

occupancies not separated from one another in accordance with Section 707.3.10 of the International Building Code shall be considered as a single occupancy for the purpose of applying this section. Portions of Group E occupancies occupied for assembly purposes shall be provided with a fire alarm system as required for the Group E occupancy.

Exceptions: {No change}

(124) **Section 907.2.3** is hereby amended to read as follows:

907.2.3 Group E. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5.2.2 and in-stalled in accordance with 907.6 shall be installed in Group E educational occupancies. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system. An approved smoke detection system shall be installed in Group E day care occupancies. Unless separated by a minimum of one hundred feet (100') of open space, all buildings, whether portable buildings or the main building, will be considered one building for alarm occupant load consideration and interconnection of alarm systems.

Exceptions:

- 1. A manual fire alarm system is not required in Group E occupancies with an occupant load of less than 50.
 - 1.1 Residential In-Home day care with not more than 12 children may use interconnected single station detectors in all habitable rooms. (For care of more than five children 2 1/2 or less years of age, see Section 907.2.6.)

{No change to remainder of exceptions.}

(125) Section 907.2.10.1 is hereby amended to read as follows:

907.2.10.1 Public- and self-storage occupancies. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group S publicand self-storage occupancies for interior corridors and interior common areas. Visible notification appliances are not required within storage units.

Exception: {no changes}

(126) **Section 907.2.13, Exception 3** is hereby amended to read as follows:

Exceptions:

- 3. Open air portions of buildings with an occupancy in Group A-5 in accordance with Section 303.1 of the International Building Code; however, this exception does not apply to accessory uses including but not limited to sky boxes, restaurants, and similarly enclosed areas.
- (127) **Section 907.4.2** is hereby amended by adding a new **Section 907.4.2.7** to read as follows:
 - **907.4.2.7 Type**. Manual alarm initiating devices shall be an approved double action type.
- (128) **Section 907.5** is hereby amended by adding a new **Section 907.5.3** to read as follows:
 - **907.5.3 Occupant notification.** Where an automatic sprinkler system is installed, occupant notification in accordance with Section 907.5 shall be provided in all new construction, as well as in existing buildings or tenant spaces undergoing renovation, where a change of occupancy occurs, or where the existing fire alarm system is modified or replaced.
- (129) **Section 907.6.1** is hereby amended by adding a new **Section 907.6.1.1** to read as follows:
 - 907.6.1.1 Wiring installation. All fire alarm systems shall be installed in such a manner that a failure of any single initiating device or single open in an initiating circuit conductor will not interfere with the normal operation of other such devices. All signaling line circuits (SLC) shall be installed in such a way that a single open will not interfere with the operation of any addressable devices (Class A). Outgoing and return SLC conductors shall be installed in accordance with NFPA 72 requirements for Class A circuits and shall have a minimum of four feet separation horizontal and one foot vertical between supply and return circuit conductors. The initiating device circuit (IDC) from an addressable input (monitor) module may be wired Class B, provided the distance from the addressable module to the initiating device is ten feet or less.
- (130) **Section 907.6.3** is hereby amended by deleting all four Exceptions.

(131) **Section 907.6.3.1** is hereby amended by adding a new **Section 907.6.3.1.1** to read as follows:

Section 907.6.3.1.1 Graphical annunciation. Graphical annunciation of initiating devices shall be provided for large, complex floor plans where required by the Fire Code Official or other sections of this code. Including:

- 1. High-rise buildings
- 2. Covered mall buildings
- 3. Hospitals
- 4. Buildings comprised of more than one street address with separate entrance.
- 5. Buildings with Group A occupancies greater than 1000 people.
- 6. Large, complex floor plans where required by the Fire Code Official.
- (132) **Section 907.6.6** is hereby amended by adding the following sentence to the end of the existing provision to read as follows:

See 907.6.3 for the required information that must be transmitted to the supervising station.

(133) **Section 907** is hereby amended by adding new **Sections 907.11 through 907.13** to read as follows:

907.11 Interconnection of fire alarm systems in multi-building developments.

In developments consisting of multiple buildings that share a common address, fire alarm systems shall be interconnected. Each building shall have its own dedicated fire alarm control panel capable of transmitting signals to a centralized monitoring location. Each building shall maintain full local control of its fire alarm system, including reset and acknowledgment functions, without reliance on the centralized location. Alarm signals from each building shall annunciate at a normally occupied location in accordance with Section 907.6.3.

- **907.12 Password protection prohibited**. No fire alarm system shall be protected by a password or pin number that would hinder immediate silencing capabilities by the fire department.
- **907.13 Occupant reset**. Once an alarm is initiated and fire department is contacted, no person shall silence or reset an alarm prior to fire department arrival.

- (134) **Section 910.2** is hereby amended by adding a new **Section 910.2.3** to read as follows:
 - **910.2.3 Group H.** Buildings and portions thereof used as a Group H occupancy as follows:
 - 1. In occupancies classified as Group H-2 or H-3, any of which are more than 15,000 square feet (1,394 m2) in single floor area.
 - **Exception**: Buildings of noncombustible construction containing only noncombustible materials.
 - In areas of buildings in Group H used for storing Class 2, 3 and 4 liquid and solid oxidizers, Class 1 and unclassified detonable organic peroxides, Class 3 and 4 unstable (reactive) materials, or Class 2 or 3 water-reactive materials as required for a highhazard commodity classification.

Exception: Buildings of noncombustible construction containing only noncombustible materials.

- (135) **Section 910.4.3.1** is hereby amended to read as follows:
 - **910.4.3.1 Makeup Air**. Makeup air openings shall be provided within 6 feet (1829 mm) of the floor level. Operation of makeup air openings shall be automatic. The minimum gross area of makeup air inlets shall be 8 square feet per 1,000 cubic feet per minute (0.74 m2 per 0.4719 m3/s) of smoke exhaust.
- (136) **Section 912.2** is hereby amended by adding a new **Section 912.2.3** to read as follows:
 - **912.2.3 Building mounted FDCs**. Building mounted FDCs shall be located on an unobstructed path and no greater than 30 feet from back of curb.
- (137) **Section 912.2** is hereby amended by adding a new **Section 912.2.4** to read as follows:
 - **912.2.4 Remote FDC**. Remote FDC's are required where section 912.2.3 is unachievable and on high-rise buildings. Remote FDCs shall be located on the opposite side of the fire lane from the serviced building. Remote FDC barrels shall be painted red.
- (138) **Section 913.2.1** is hereby amended by adding a second paragraph and exception to read as follows:

When located on the ground level at an exterior wall, the fire pump room shall be provided with an exterior fire department access door that is not less than 3 feet in width and 6ft.-8in in height, regardless of any interior doors that are provided. A key box shall be provided at this door, as required by Section 506.1.

Exception: When it is necessary to locate the fire pump room on other levels not at an exterior wall, the corridor leading to the fire pump room access from the exterior of the building shall be provided with equivalent fire resistance as that required for the pump room, or as approved by the Fire Code Official. Access keys shall be provided in the key box as required by Section 506.1.

(139) **Section 914.3.1.2** is hereby amended to read as follows:

914.3.1.2 Water Supply to required fire pumps. In buildings that are more than 120 feet in building height, required fire pumps shall be supplied by connections to no fewer than two water mains located in different streets. Separate supply piping shall be provided between each connection to the water main and the pumps. Each connection and the supply piping between the connection and the pumps shall be sized to supply the flow and pressure required for the pumps to operate.

Exception: {No change to exception.}

(140) **Section 915** is amended by replacing in its entirety to read as follows.

915.1 General. New and existing buildings shall be provided with carbon monoxide (CO) detection in accordance with Sections 915.2 through 915.5.

915.2 Where required. Carbon monoxide detection shall be provided in interior spaces, other than dwelling units or sleeping units, that are exposed to a carbon monoxide source in accordance with Sections 915.2.1 through 915.2.3. Carbon monoxide detection for dwelling units or sleeping units that are exposed to a carbon monoxide source shall be in accordance with Section 915.2.4.

915.2.1 Interior spaces with direct carbon monoxide sources. In all occupancies, interior spaces with a direct carbon monoxide source shall be provided with carbon monoxide detection located in close proximity to the direct carbon monoxide source and in accordance with Section 915.3.

Exception: Where environmental conditions in an enclosed space are incompatible with carbon monoxide detection devices, carbon monoxide detection shall be provided in an approved adjacent location.

915.2.2 Interior spaces adjacent to a space containing a carbon monoxide source. In Groups A, B, E, I, M and R Occupancies, interior spaces that are separated from and adjacent to an enclosed parking garage or an interior space that contains a direct carbon monoxide source shall be provided with carbon monoxide detection if there are communicating openings between the spaces. Detection devices shall be located in close proximity to communicating openings on the side that is furthest from the carbon monoxide source and in accordance with Section 915.3

Exceptions:

- 1. Where communicating openings between the space containing a direct carbon monoxide source and the adjacent space are permanently sealed airtight, carbon monoxide detection is not required for the adjacent space.
- 2. Where the Fire Code Official determines that the volume or configuration of the adjacent interior space is such that dilution or geometry would diminish the effectiveness of carbon monoxide detection devices located in such spaces, detection devices additional to those required by Section 915.2.1 shall be located on the side of communicating openings that is closest to the carbon monoxide source.
- **915.2.3 Interior spaces with forced-indirect carbon monoxide sources.** In all occupancies, interior spaces with a forced-indirect carbon monoxide source shall be provided with carbon monoxide detection in accordance with either of the following:
 - 1. Detection in each space with a forced-indirect carbon monoxide source, located in accordance with Section 915.3.
 - 2. Detection only in the first space served by the main duct leaving the forced-indirect carbon monoxide source, located in accordance with Section 915.3, with an audible and visual alarm signal provided at an approved location.
- **915.2.4 Dwelling units and sleeping units.** Carbon monoxide detection for dwelling units and sleeping units shall comply with Sections 915.2.4.1 and 915.2.4.2.

- 915.2.4.1 Direct carbon monoxide sources. Where a direct carbon monoxide source is located in a bedroom or sleeping room, or a bathroom attached to either, carbon monoxide detection shall be installed in the bedroom or sleeping room. Where carbon monoxide detection is not installed in bedrooms or sleeping rooms, carbon monoxide detection shall be installed outside of each separate sleeping area in close proximity to bedrooms or sleeping rooms for either of the following conditions:
 - 1. The dwelling unit or sleeping unit has a communicating opening to an attached, enclosed garage.
 - 2. A direct carbon monoxide source is located in the dwelling unit or sleeping unit outside of bedrooms or sleeping rooms.
- **915.2.4.2 Forced-indirect carbon monoxide sources.** Bedrooms or sleeping rooms in dwelling units or sleeping units that are exposed to a forced-indirect carbon monoxide source shall be provided with carbon monoxide detection in accordance with Section 915.2.4.1 or Section 915.2.3.
- 915.3 Location of detection devices. Carbon monoxide detection devices shall be installed in accordance with manufacturer's instructions in a location that avoids dead air spaces, turbulent air spaces, fresh air returns, open windows, and obstructions that would inhibit accumulation of carbon monoxide at the detection location. Carbon monoxide detection in air ducts or plenums shall not be permitted as an alternative to required detection locations.
- **915.4 Permissible detection devices.** Carbon monoxide detection shall be provided by a carbon monoxide detection system complying with Section 915.4.2 unless carbon monoxide alarms are permitted by Sections 915.4.1.
- **915.4.1 Carbon monoxide alarms.** Carbon monoxide alarms complying with Sections 915.4.1.1 through 915.4.1.3 shall be permitted in lieu of a carbon monoxide detection system in both of the following:
 - 1. Dwelling units and sleeping units.
 - 2. Locations other than dwelling units or sleeping units, where approved, provided that the manufacturer's instructions do not prohibit installation in locations other than dwelling units or sleeping units and that the alarm signal for any carbon monoxide alarm installed in a normally unoccupied location is

annunciated by an audible and visual signal in an approved location.

915.4.1.1 Power source. In buildings with a wired power source, carbon monoxide alarms shall receive their primary power from a permanent connection to building wiring, with no disconnecting means other than for overcurrent protection, and shall be provided with a battery backup. In buildings without a wired power source, carbon monoxide alarms shall be battery powered.

Exception: For existing buildings not previously required to have carbon monoxide alarms permanently connected to a wired power source, existing battery-powered and plug-in with battery backup carbon monoxide alarms shall be permitted to remain in service. When replaced, replacement with battery-powered and plug-in with battery backup carbon monoxide alarms shall be permitted.

- **915.4.1.2 Listings.** Carbon monoxide alarms shall be listed in accordance with UL 2034. Combination carbon monoxide/smoke alarms shall also be listed in accordance with UL 217.
- **915.4.1.3 Interconnection.** Where more than one carbon monoxide alarm is installed, actuation of any alarm shall cause all of the alarms to signal an alarm condition.
- **915.4.2 Carbon monoxide detection systems.** Carbon monoxide detection systems shall be installed in accordance with NFPA 72.
- **915.4.2.1 Fire alarm system integration.** Where a building fire alarm system or combination fire alarm system, as defined in NFPA 72, is installed, carbon monoxide detection shall be provided by connecting carbon monoxide detectors to the fire alarm system. Where a building fire alarm system or a combination fire alarm system is not installed, carbon monoxide detection shall be provided by connecting carbon monoxide detectors to a carbon monoxide detection system complying with NFPA 72.
- **915.4.2.2 Listings.** Carbon monoxide detectors shall be listed in accordance with UL 2075. Combination carbon monoxide/smoke detectors shall be listed in accordance with UL 268 and UL 2075.
- **915.4.2.3 Alarm notification.** For other than Group E Occupancies, activation of a carbon monoxide detector shall initiate alarm notification in accordance with any of the following:

- 1. An audible and visible alarm notification throughout the building and at the control unit.
- 2. Where specified in an approved fire safety plan, an audible and visible alarm in the signaling zone where the carbon monoxide has been detected and other signaling zones specified in the fire safety plan, and at the control unit.
- 3. Where a sounder base is provided for each detector, an audible alarm at the activated carbon monoxide detector and an audible and visible alarm at the control unit.

For Group E Occupancies having an occupant load of 30 or less, alarm notification shall be provided in an on-site location staffed by school personnel or in accordance with the notification requirements for other occupancies. For Group E occupancies having an occupant load of more than 30, an audible and visible alarm shall be provided in an on-site location staffed by school personnel.

- **915.5 Maintenance.** Carbon monoxide alarms and carbon monoxide detection systems shall be maintained in accordance with NFPA 72 and the manufacturer's instructions. Carbon monoxide alarms and carbon monoxide detectors that become inoperable or begin producing end-of-life signals shall be replaced.
- (141) **Section 1006.2.1, Exemption #3** is hereby amended to read as follows:
 - **1006.2.1** Egress based upon occupant load and common path of egress travel distance. Two exits or exit doorways from any space shall be provided where the design occupant load or the common path of travel distance exceeds the values listed in Table 1006.2.1. The cumulative occupant load from adjacent rooms, areas or spaces shall be determined in accordance with Section 1004.2.

Exceptions:

- 1. {No change}
- 2. {No change}
- 3. Unoccupied rooftop mechanical rooms and penthouses are not required to comply with the common path of egress travel distance measurements.
- (142) **Section 1023.9** is hereby amended by adding **Section 1023.9.2** to read as follows:

- **1023.9.2 Parking garages.** In parking garages, stairway identification signs shall also include the building address in letters not less than 1 1/2 inches in height. Elevator lobbies shall be provided with signage consistent with Section 1023.9.1, including the building address as required by this section.
- (143) **Section 1101** is hereby amended by adding **Section 1101.5** to read as follows:
 - **1101.5 Cumulative work**. Where the cumulative work over any period of time is greater than or equal to 50 percent of the building's initial floor area, the provisions of this section shall apply. Initial building floor area shall be determined by the building's original, or oldest available, building permit construction documents.
- (144) **Section 1102** is hereby amended by adding the following definition:
 - **WORK AREA**. The portion or portions of a building consisting of all reconfigured spaces as indicated on the construction documents. Work area excludes other portions of the building where incidental work entailed by the intended work must be performed and portions of the building where work not initially intended by the owner is specifically required by this or other codes.
- (145) **Section 1103.5.1** is hereby amended to add a sentence to the end of the existing paragraph to read as follows:
 - Fire sprinkler system installation shall be completed within 24 months from date of notification by the Fire Code Official.
- (146) **Section 1103.5** is hereby amended by adding a new **Section 1103.5.6** to read as follows:
 - **1103.5.6 Spray booths and rooms**. Existing spray booths and spray rooms shall be protected by an approved automatic fire extinguishing system in accordance with Section 2404.
- (147) **Section 1003.5** is hereby amended by adding a new **Section 1103.5.7** and **Section 1003.5.8** to read as follows:
 - **1103.5.7 IEBC Level 3 Alterations.** Any occupancy group where the work area exceeds 50 percent of the building or floor area, and an automatic sprinkler system is required by Section 903, shall install an automatic sprinkler system throughout the building in accordance to this code.

- **1103.5.8 Extended footprint greater than six thousand (6,000) square feet.** Any building that extends its footprint greater than 6,000 square feet, regardless of its current square footage shall install an automatic sprinkler system.
- (148) **Section 1103.6** is hereby amended by adding a new **Section 1103.6.3** to read as follows:
 - 1103.6.3 IEBC Level 3 Alterations and Change of Use. Any occupancy group where an automatic fire sprinkler system is required by this section, and a standpipe system is required by Section 905, shall install a standpipe system throughout the building in accordance to this code.
- (149) **Section 1103.7** is hereby amended by adding new **Sections 1103.7.7** and **1103.7.7.1** to read as follows:
 - **1103.7.7 Fire alarm system design standards**. Where an existing fire alarm system is upgraded or replaced, the devices shall be addressable. Fire alarm systems utilizing more than 20 smoke and/or heat detectors shall have analog initiating devices.
 - **1103.7.7.1 Communication requirements**. Refer to Section 907.6.6 for applicable requirements.
- (150) **Section 1103.7.7** is hereby amended by adding a new **Section 1103.7.7.2** to read as follows:
 - **1103.7.7.2 IEBC Level 3 Alterations and Change of Use.** Any occupancy group where the work area exceeds 50 percent of the building or floor area, and a fire alarm system is required by Section 907, shall install a fire alarm and detection system in accordance to this code.
- (151) **Section 1103.9** is hereby amended to read as follows:
 - **1103.9 Cabon monoxide detection.** Carbon monoxide detection shall be installed in existing buildings in accordance with Section 915.
- (152) **Section 1201** is hereby amended by adding **Section 1201.4** to read as follows:
 - **1201.4 Electrical shutdown.** Energy systems including solar photovoltaic power systems, stationary fuel cell power systems, or electrical energy storage systems, shall have a remote power shut

down box. The location shall be at an approved location. The box shall only be accessible by the fire department and shall be keyed to the fire department key box as outlined in Section 506.

(153) **Section 1203.2** is amended by adding Section **1203.2.20** to read as follows:

1203.20 Firefighter Air Replenishment Systems (FARS). Emergency Power shall be provided for FARS as required in Appendix L.

(154) **Section 1207** is hereby amended by adding **Section 1207.2** to read as follows:

1207.2 Commissioning, decommissioning, operation and maintenance. Commissioning, decommissioning, operation and maintenance shall be conducted in accordance with this section. In addition to the ordinary inspection and test requirements that buildings, structures, and parts thereof are required to undergo, Energy Storage Systems subject to the provisions of Section 1207 shall undergo special inspections and test sufficient to verify the proper commissioning of the Energy Storage System in its final condition. The design submission accompanying the construction documents shall clearly detail procedures and methods to be used and the items subject to such inspections and test. Such commissioning shall be in accordance with generally accepted engineering practices and, where possible, based on published standards for the particular testing involved. The special inspections and test required by this section shall be conducted under the same terms as in Chapter 17 of the International Building Code.

(155) Section 2304.1 is hereby amended to read as follows:

2304.1 Supervision of dispensing. The dispensing of fuel at motor fuel-dispensing facility shall be in accordance with the following:

- 1. Conducted by a qualified attendant; and/or,
- 2. Shall be under the supervision of a qualified attendant; and/or
- 3. Shall be an unattended self-service facility in accordance with Section 2304.3.

Any time, the qualified attendant of item Number 1 or 2 above is not present, such operations shall be considered as an unattended self-service facility and shall also comply with Section 2304.3.

(156) **Section 2401.2** is hereby deleted in its entirety.

(157) **Section 3206.7.3** is hereby amended by adding a paragraph to read as follows:

3206.7.3 Access to doors. Fire Department access doors shall be readily accessible and provided with a 10-foot-wide striped path from the fire lane to the fire access door where required by the Fire Code Official.

Fire department access doors shall be able to be accessed without the use of a ladder.

(158) **Section 3307.1** is hereby amended to read as follows:

3307.1 Required access. Approved vehicle access for firefighting and emergency response shall be provided to all construction or demolition sites. Vehicle access shall be provided to within <u>50</u> feet of temporary or permanent fire department connections. Vehicle access shall be provided by either temporary or permanent roads, capable of supporting vehicle loading under all weather conditions. Vehicle access shall be maintained until permanent fire apparatus access roads are available. When fire apparatus access roads are required to be installed for any structure or development, access shall be approved prior to the time which construction has progressed beyond completion of the foundation of any structure. Whenever the connection is not visible to approaching fire apparatus, the fire department connection shall be indicated by an approved sign.

(159) **Section 3307.1.2** is hereby amended to read as follows:

3307.1.2 Stairways required. Where building construction exceeds 40 feet in height above the lowest level of fire department vehicle access, a temporary or permanent stairway shall be provided. As construction progresses, such stairways shall be extended to within one floor of the highest point of construction having secured decking and flooring. Whenever the stairways are not visible to approaching fire apparatus, the stairways locations shall be indicated by an approved sign.

(160) **Section 3307.5** is hereby amended by adding Section 3307.5.3 to read as follows:

3307.5.3 Standpipe signage. Whenever the standpipes are not visible to approaching apparatus, locations shall be identified by an approved sign.

(161) **Section 4104.2** is hereby amended to read as follows:

4104.2 Open-flame Cooking Devices. Charcoal burners and other open-flame cooking devices, charcoal grills and other similar devices used for cooking shall not be operated or located on combustible balconies, decks, or within 10 feet (3048 mm) of combustible construction.

Exceptions:

- One- and two-family dwellings where LP-gas containers are limited to a water capacity not greater than 50 pounds (22.68 kg) [nominal 20-pound (9.08 kg) LP-gas capacity] with an aggregate LP-gas capacity not to exceed 100 pounds (5 containers). All LP-gas containers shall be stored outside, as per Chapter 61.
- 2. Where buildings, balconies and decks are protected by an approved *automatic sprinkler system*, and LP-gas containers are limited to a water capacity not greater than 50 pounds (22.68 kg) [nominal 20-pound (9.08 kg) LP-gas capacity], with an aggregate LP-gas capacity not to exceed 40 lbs. (2 containers). All LP-gas containers shall be stored outside, as per Chapter 61.
- 3. LP-gas cooking devices having LP-gas containers with a water capacity not greater than 2-1/2 pounds [nominal 1-pound (0.454 kg) LP-gas capacity].
- (162) **Section 5307.3.2** is hereby amended by adding **Item 2.1** to read as follows:
 - 2.1 Where a building fire alarm system is installed, the gas detection system shall be monitored by the building alarm system and send the alarm signal to the central station upon activation. The alarm shall not initiate occupant notification devices.
- (163) **Section 5307.4.3** is hereby amended by adding **Item 2.1** to read as follows:
 - 2.1 Where a building fire alarm system is installed, the gas detection system shall be monitored by the building alarm system and send the alarm signal to the central station upon activation. The alarm shall not initiate occupant notification devices

(164) **Section 5601.1.3** is hereby amended to read as follows:

5601.1.3 Fireworks. The possession, manufacture, storage, sale, handling and use of fireworks are prohibited. The presence or use of fireworks within the jurisdiction of the City of McKinney in violation of this Ordinance is hereby declared to be a common and public nuisance. The restrictions of this section shall be applicable and in force throughout the territory of the City of McKinney, Texas, and extending for a distance outside the City limits for a total of 5,000 feet (5,000'); provided that this section shall not be in effect within any portion of such 5,000 feet (5,000') area which is contained within the territory of any other municipal corporation. The owner, lessee or occupant of the property or structure where fireworks are being stored or used shall be deemed responsible for violating this section.

Exceptions:

- 1. Only when approved for fireworks displays, the storage and handling of fireworks as allowed in Section 5604 and 5608.
- 2. The use of fireworks for <u>approved</u> displays as allowed in Section 5608.
- Pursuant to 217.042(c) of the Texas Local Government Code, the sale of fireworks outside of the City's limits does not fall within the definition of and is not prohibited as a common and public nuisance outside of the City's corporate limits only.
- (165) Section 5703.6 is hereby amended to read as follows:

5703.6 Piping systems. Piping systems, and their component parts, for flammable and combustible liquids shall be in accordance with Sections 5703.6.1 through 5703.6.11. An approved method of secondary containment shall be provided for underground tank and piping systems.

(166) **Section 5704.2.11.4** is hereby amended to read as follows:

Section 5704.2.11.4 Leak prevention. Leak prevention for underground tanks shall comply with Sections 5704.2.11.4.1 through 5704.2.11.4.3. An approved method of secondary containment shall be provided for underground tank and piping systems.

(167) **Section 5704.2.11.4.2** is hereby amended to read as follows:

5704.2.11.4.2 Leak detection. Underground storage tank systems shall be provided with an approved method of leak detection from

any component of the system that is designed and installed in accordance with NFPA 30 and as specified in Section 5704.2.11.4.3.

(168) **Section 5704.2.11.4** is hereby amended by adding a new **Section 5704.2.11.4.3** to read as follows:

5704.2.11.4.3 Observation wells. Approved sampling tubes of a minimum 4 inches (4") in diameter shall be installed in the backfill material of each underground flammable or combustible liquid storage tank. The tubes shall extend from a point 12 inches (12") below the average grade of the excavation to ground level and shall be provided with suitable surface access caps. Each tank site shall provide a sampling sump at the corners of the excavation with a minimum of four (4) sumps. Sampling tubes shall be placed in the product line excavation within 10 feet (10') of the tank excavation and one every 50 feet (50') routed along product lines towards the dispensers, and a minimum of two (2) are required.

(169) **Section 5707.4** is hereby amended by adding a paragraph to the end of the existing paragraph to read as follows:

Mobile fueling sites shall be restricted to commercial, industrial, governmental, or manufacturing, where the parking area having such operations is primarily intended for employee vehicles. Mobile fueling shall be conducted for fleet fueling or employee vehicles only, not the general public. Commercial sites shall be restricted to office-type or similar occupancies that are not primarily intended for use by the public.

(170) Table B105.2 is hereby amended to read as follows:

Table B105.2
REQUIRED FIRE FLOW FOR BUILDINGS OTHER THAN ONE-AND TWO-FAMILY DWELLINGS, GROUP R-3 AND R-4 BUILDINGS, TOWNHOMES AND BUILT-FOR-RENTS

AUTOMATIC SPRINKLER	MINIMUM FIRE	FLOW DURATION
SYSTEM (Design	FLOW (gpm)	(hours)
Standard)		
No automatic sprinkler	Value in Table	Duration in Table
system	B105.1(2)	B105.1(2)
Section 903.3.1.1 of the IFC	50% of the value in	Duration in Table
	Table B105.1(2) a	B105.1(2) at the
		reduced flow rate
Section 903.3.1.2 of the IFC	50% of the value in	Duration in Table
	table B105.1(2) b	B105.1(2) at
		reduced flow rate

- (171) **Table B105.2** is hereby amended by amending **Footnote a.** to read as follows:
 - a. The reduced fire-flow shall not be less than 1,500 gallons per minute.
- (172) **Table C102.1** is hereby amended to read as follows:

Table C102.1 REQUIRED NUMBER AND SPACING OF FIRE HYDRANTS h

FIRE-FLOW	MINIMUM	AVERAGE	MAXIMUM
REQUIREMENTS	NUMBER	SPACING	DISATNCE FROM
(gpm)	OF	BETWEEN	ANY POINT ON
	HYDRANTS	HYDRANTS a,	STREET OR
	i, j	b, c, f, g (feet)	ROAD FRONTAGE
		,	TO A HYDRANT d,
			f, g
2,250 or less	2	500	225
2,251 – 2750	3	450	225
2,751 – 3,250	3	450	225
3,251 - 4,000	4	350	210
4,001 – 5,000	5	300	180
5,001 – 5,500	6	300	180
5,501 – 6,000	6	250	150
6,001 – 7,000	7	250	150
7,001 or more	8 or more ^e	200	120

- (173) **Table C102.1** is hereby amended by amending the footnotes to read as follows:
 - a. through e. {unchanged}
 - f. {deleted}
 - g. {deleted}
 - h. {unchanged}
 - i. A minimum of 100 feet between hydrants is required to be included in hydrant count.
- (174) **Section D102.1** is hereby amended to read as follows:

D102.1 Access and loading. Facilities, buildings, or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an approved fire apparatus access road with an

asphalt, concrete or other approved driving surface capable of supporting the imposed load of fire apparatus weighing up to 85,000 pounds.

(175) **Section D103.4** and Table D103.4 are hereby amended to read as follows:

D103.4 Dead ends. Dead-end fire apparatus access roads in excess of 150 feet shall be provided with width and turnaround provisions in accordance with Table D103.4.

TABLE D103.4
REQUIREMENTS FOR DEAD-END FIRE APPARATUS ACCESS ROADS

LENGTH (feet)	WIDTH (feet)	TURNAROUNDS REQUIRED
0–150	<u>24</u>	None required
151–500	<u>24</u>	120-foot Hammerhead, 60-foot "Y" or 100-foot diameter cul-de-sac in accordance with Figure D103.1
501–750	<u>26</u>	120-foot Hammerhead, 60-foot "Y" or 100-foot diameter cul-de-sac in accordance with Figure D103.1
Over 750	Special app	roval required

For SI: 1 foot = 304.8 mm.

(176) **Section D103.5** is hereby amended to read as follows:

Section D103.5 Fire apparatus access road gates. Fire apparatus access road gates shall meet the MFD-FMO Gate Access Guide.

(177) **Section D103.6** is hereby amended to read as follows:

D103.6 Marking. Striping, signs, or other markings, when approved by the Fire Code Official, shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. Striping, signs, and other markings shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.

(1) Striping – Fire apparatus access roads shall be continuously marked by painted lines of red traffic paint six inches (6") in width to show the boundaries of the lane. The words "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" shall appear in four inch (4") white letters at 25 feet intervals on the red border markings along

both sides of the fire lanes. Where a curb is available, the striping shall be on the vertical face of the curb.

(2) Signs – Signs shall read "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" and shall be 12" wide and 18" high (See Figure D103.6). Signs shall have red letters on a white reflective background, using not less than 2" lettering. Signs shall be permanently affixed to a stationary post and the bottom of the sign shall be six feet, six inches (6'6") above finished grade. Signs shall be spaced not more than fifty feet (50') apart along both sides of the fire lane. Signs may be installed on permanent buildings or walls or as approved by the Fire Chief.

{Figure D103.6 Unchanged}

- (178) Section D103.6.1 and D103.6.2 are hereby deleted in their entirety.
- (179) Section D104.3 is hereby amended to read as follows:
 - **D104.3 Remoteness**. Where two fire apparatus access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the lot or area to be served, measured in a straight line between accesses, or as approved by the Fire Code Official.
- (180) Section D105.3 is hereby amended to read as follows:
 - **D105.3 Proximity to building.** Unless otherwise approved by the Fire Code Official, one or more of the required access routes meeting this condition shall be located not less than 15 feet (4572 mm) and not greater than 30 feet (9144 mm) from the building and shall be positioned parallel to one entire side of the building. The side of the building on which the aerial fire apparatus access road is positioned shall be approved by the Fire Code Official.
- (181) **Section D106.3** is hereby amended to read as follows:
 - **D106.3 Remoteness.** Where two fire apparatus access roads are required, they shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses, or as approved by the Fire Code Official.
- (182) **Section D107.2** is hereby amended to read as follows:

- **D107.2 Remoteness.** Where two fire apparatus access roads are required, they shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses, or as approved by the Fire Code Official.
- (183) **Section L101** is hereby amended by adding a new **Section L101.2** to read as follows:
 - **L101.2 Where required**. FARS shall be provided in all new construction when any one of the following conditions occur:
 - 1. Any building with an occupied floor located more than 75 feet above the lowest level of fire department access.
 - 2. Any building with 2 or more stories below grade plane.
- (184) **Section L103.1** is hereby amended by adding a new **Section L103.1.1** to read as follows:
 - **L103.1.1 Submittals**. Plans and specifications shall be from a Firefighter Air Replenishment company and sealed by a Texas licensed Professional Engineer.
- (185) **Section L104** is amended by adding a new **Section L104.4.16** to read as follows:
 - **L104.16 Emergency Power.** FARS shall be provided with emergency power in accordance with Section 1203.
- (186) **Section L104.5.1** is hereby amended by adding a new **Section L104.5.1.1** to read as follows:
 - **L104.5.1.1 Location**. Stored pressure air supply shall be located in the fire command room or fire protection equipment room as determined by the Fire Code Official.
- (187) Section L106.1; add paragraph to read as follows:

The inspecting FARS contractor shall provide annual inspection tag/sticker on the FARS' interior air monitoring panel. Tag/sticker shall identify approved inspecting contractor's name, physical address, phone number, and certified inspector's name, as well as date of inspection. System shall not be tagged until all inspection requirements of this section are conducted. Tag/sticker shall be blue in color for a passing system. If this is not possible for any reason,

tag/sticker shall be red in color for a failing system with reasons for failure indicated on the tag if possible. If red tag/sticker is placed, AHJ/Fire Marshal shall be notified immediately within a maximum of 24 hours.)

Sec. 42-27. - Fire Code Permit and Other Fees.

- (a) The schedule of fees for various permits, inspections, plan review fees, and other services performed by the Fire Code Official shall be paid to the City before any permit is issued. The schedule of fees therefor shall be as specified in Appendix A of the Code of Ordinances which may be amended from time to time by ordinance.
- (b) Non-exclusivity of fees. The assessment or payment of any fee related to a fire code violation shall not prohibit or limit the Fire Code Official to issue citations or pursue other enforcement actions as provided by this code. Fees are independent of, and may be imposed in addition to, any penalties or corrective measures authorized by law.
- (c) Fire Review Fees.
 - i. A *fire review fee* shall be charged for building permit review and associated inspections conducted by the fire prevention division. Fire review fees are exclusive of fees related to fire permits as established in Table 102.1, as contained in Appendix A of the Code of Ordinances, which may be amended from time to time by ordinance.
 - ii. When the original plans have been reviewed and found to be unacceptable, a *fire review resubmittal* fee shall be charged to the applicant for the second plan review and each subsequent review until the plans are found to be acceptable.
- (d) Operational Permit Fees. Fees shall be assessed for all operational permits required by Section 105.5 of the Fire Code as specified in Table 103.2.
- (e) Construction Permit Fees. Where permits and/or inspections are required by the fire code or building codes, fees shall be assessed as specified in Table 103.3, as contained in Appendix A of the Code of Ordinances, which may be amended from time to time by ordinance. An invoice will be provided to the applicant upon final approval of the application. A permit is not considered issued until all fees associated with the review are complete.

- i. Upon application for a construction permit the applicant shall be required to pay a non-refundable *application fee*.
- ii. A *permit fee* shall be charged for the initial review of a submitted permit application and shall include the initial inspection(s) required by the Fire Code and applicable standards.
- iii. When the original plans have been reviewed and found to be unacceptable, a *fire plan review resubmittal fee* shall be charged to the applicant for the second plan review and each subsequent review until the plans are found to be acceptable.
- iv. When the original plans have been reviewed and found to be acceptable, a *fire plan review post-approval fee* shall be charged to the permit applicant for each additional plan review conducted.
- v. Inspection cancelled at the time of inspection by either the contractor or the Fire Code Official due to the lack of readiness on the part of the applicant/contractor (e.g. no-show, not ready when scheduled) or due to Fire Code violations shall be charged a *cancellation fee*.
- vi. When a scheduled inspection is cancelled without a minimum of 24-hour notice, a *reschedule fee* shall be charged to the applicant/contractor.
- vii. Re-inspections that are required due to a failed inspection on a fire construction permit or building permit, a *reinspection fee* shall be charged the applicant/contractor. Re-inspection fees must be paid prior to scheduling the follow-up inspections.
- viii. Where work has commenced prior to permit approval, including all fees paid, a *working without a permit fee*, in addition to the permit fee, shall be charged to the applicant.
- ix. Where a system has been placed in operation without first obtaining a permit or final acceptance inspection, a *release of unaccepted system fee,* in addition to the permit fee, shall be charged to the applicant/contractor.
- (f) Code Compliance Fees. Fees shall be assessed for all code compliance inspections in accordance with this section and as specified in Table 104.1, as contained in in Appendix A of the Code of Ordinances, which may be amended from time to time by ordinance.

- i. Where an inspection is required for the continued operation for a state or third-party agency, including but not limited to health care, day care, and group care facilities, an initial inspection fee shall be charged to the business as specified in Table 104.1.
- ii. Re-inspection fees shall be charged to the occupant, manager, building/business owner in control of the property/space where the violation is noted.
- iii. Re-inspection fees shall be charged to the occupant, manager, building/business owner who is responsible for ensuring the inspection, testing, and maintenance of a regulated system.
- iv. A *late payment penalty* shall be imposed on any occupant, property manager, or building or business owner who has been invoiced by, or on behalf of, the Fire Department and fails to remit full payment within thirty (30) days of the billing date. The penalty shall be assessed on the thirty-first (31st) day following the original billing date and shall continue to accrue until the outstanding balance is paid in full.
- (g) Other Fees. All other fees shall be assessed in accordance with this section and as specified in Table 105.1, as contained in in Appendix A of the Code of Ordinances, which may be amended from time to time by ordinance.
 - i. Where requested and approved, or as required by the Fire Code Official, an after-hours fee shall be charged to the contractor or applicant where Fire Prevention personnel are provided to conduct after- or before-hour inspections or provide stand-by services.
 - ii. Where a variance is requested a non-refundable *variance* request fee shall be charged to the contractor or applicant at the time of request.
 - iii. Where a phased approval is requesting a non-refundable phasing plan review fee shall be charged, in addition to all other fees, to the contractor or applicant at the time of request.
 - iv. When the review workflow and staffing capacity allow, an expedited plan review may be offered at the discretion of the Fire Code Official. If requested and approved, a non-refundable *expedited review fee* shall be charged, in addition

to the *permit fee*, to the contractor or applicant at the time of acceptance.

v. Where a flow test is required to be performed for the purpose of fire flow calculations the test shall be performed by the contractor and witnessed by the Fire Code Official. A *flow test fee* shall be charged to the requesting contractor prior to the performance of the test. *Cancelation* and *reschedule fees* of Table 103.3 shall apply."

Section 3. From and after the date of this Ordinance, Appendix A, "Schedule of Fees," is hereby amended by deleting the existing Schedule of Fees for Chapter 42, "Fire Prevention and Protection," in its entirety and replacing it with a new Schedule of Fees for Chapter 42, "Fire Prevention and Protection," to read as follows:

"Chapter 42. Fire Prevention and Protection.

Sec. 42-27. - Fire Code Permit and Other Fees.

Table 102.1 Fire Review Fees

Fire Review Fee	
Fire Review Fee	\$150.00 + \$0.06 per square foot
Fire Review Fee – Resubmittal	25% of Fire Review Fee (\$150.00 min)

Table 103.2 IFC Operational Permit Fees

Operational Permits	
One-time Issued	\$200.00 (Base)
Special Amusement / Amusement areas	\$200.00
	plus after-hours/standby fee
	(if required)
Carnival and Fairs	\$200.00
	plus after-hour/standby fee
	(if required)
Fireworks / Pyrotechnics	\$200.00
	plus after-hour/standby & re-
	cover fee (if required)
Annual Issued	
Additive manufacturing	\$150.00
Aerosol products, aerosol cooking spray products, and	\$150.00
plastic aerosol 3 products	
Aviation facilities	\$150.00
Cellulose nitrate film	\$150.00
Combustible dust producing operations	\$150.00
Combustible fibers	\$150.00
Compressed gases (incl. beverage dispensing) (Renewal)	\$150.00
Covered and open mall buildings	\$150.00
Cryogenic fluids	\$150.00
Emergency Responder Communication Effancement	\$150.00
System (ERCES)	
Energy Storage Systems (Renewal)	\$150.00
Exhibits and trade shows	\$150.00
Explosives (Renewal)	\$150.00
Firefighter Air Replacement Systems (FARS) (Renewal)	\$150.00
Flammable and combustible liquids	\$150.00
Haz-Mat (Renewal)	\$150.00
HPM (hazardous production material)	\$150.00
High-Piled Combustible Storage (Renewal)	\$150.00
Industrial Ovens (Renewal)	\$150.00
Lithium Batteries (Renewal)	\$150.00
Lumber yards and woodworking plants	\$150.00

Magnesium	\$150.00
Miscellaneous combustible storage	\$150.00
Mobile food preparation vehicles	\$150.00
Motor fuel-dispensing facilities	\$150.00
Outdoor assembly event	
Occupancy Load 301 – 1000	\$150.00
Occupancy Load > 1000	\$300.00
Pyroxylin plastics (>25 lbs)	\$150.00
Refrigerant equipment	\$150.00
Repair garages	\$150.00
Rooftop heliport	\$150.00
Spraying and Dipping (Renewal)	\$150.00
Storage of scrape tires and tire products	\$150.00
Temporary membrane structure, special event structures	\$150.00
and tents	
Temporary heating or cooking tents or membrane struc-	\$150.00
ture	
Tire-rebuilding plants	\$150.00
Waste handling	\$150.00
Wood products	\$150.00

Table 103.3 IFC Construction Permit Fees

Table 103.3 IFC Construction Permit Fees	
Fire Plan Review Fees	
Fire Plan Review Fee – Resubmittal	25% of Fire Permit Construction Permit
riie riaii Neview ree – Nesubiliillai	Fee (\$150.00 min)
Fire Plan Review Fee – Post Approval	\$150.00
Fire Permits	
Application Fee	\$100.00
Automatic fire-extinguishing systems	
Commercial Hood Suppression	\$150.00 per system
Other Suppression Systems (gaseous,	\$500 + \$70.00 (per nozzle after 5)
CO2, Dry Chem)	· ·
Automatic sprinkler systems	\$150.00 + \$0.025 per sq.ft
Foam (add-on)	\$500.00
Fire Pump (add-on)	\$500.00
Private Water Storage (add-on)	\$500.00
Remote FDC	\$250.00
Fire Service Underground	\$250.00
Compressed Gases (incl. Carbon Dioxide	\$300.00 (includes initial operational per-
Beverage Systems)	mit)
Cayogonio fluido	\$300.00 (includes initial operational per-
Cryogenic fluids	mit)
Egress access control doors	\$150.00 + \$50 per door
Electric Vehicle (EV) Chargers	\$150.00
Emergency generator	\$150.00
Emergency responder communications en-	\$300.00 (includes initial operational per-
hancement systems (ERCES)	mit)
Energy storage systems 64	\$150.00
Fire alarm and detection systems	\$150.00 + \$0.025 per sq.ft.
Fire lane modification/repair	\$150.00*
Firefighter Air Replacement Systems (FARS)	\$250.00 + \$100.00 per connection*
Flammable and combustible liquids (base)	\$250.00
Aboveground Storage Tanks	\$250.00 per tank
Underground Storage Tanks	\$250.00 + \$100 per additional tank*
UGST removal/abandonment	\$250.00 per site
Fuel cell power systems	\$150.00
Gas detection systems	\$150.00
Gate access systems	\$150 per gate
Hazardous Materials	\$300.00 (includes initial operational per- mit)

High-piled combustible storage	\$300.00 (includes initial operational per- mit)
Industrial Ovens	\$300.00 (includes initial operational per- mit)
Lithium-Ion and Lithium-Ion Battery Storage	\$300.00 (includes initial operational per- mit)
LP-Gas	State Issue?
LPG Exchange	\$300.00 (includes initial operational per- mit)
Smoke control or smoke exhaust systems	\$500.00
Solar photovoltaic power systems	\$150.00
Spraying and Dipping	\$300.00 (includes initial operational per- mit)
Standpipe system	\$150.00 + \$50.00 per connection
Tent, Membrane Structure	\$150.00 per tent
Cancelation / Reschedule Fees	
Cancelation (Lack of Readiness / No Show / Fire Code Violation)	\$400.00
Reschedule (< 24 hours)	\$150.00
Re-Inspection Fee [Permit]	
First (failed) Inspection	\$150.00
Second (failed) Inspection	\$250.00
Third (failed) Inspections	\$500.00
Subsequent (failed) Inspections	\$500.00 + \$250 for each additional inspection
Other Fees	
Working without Permit	2x Permit Fee (\$500.00 min)
Release of system prior to approval	2x Permit Fee (\$500.00 min)

Table 104.1 Code Compliance Fees

State or agency required inspections	
State Licensed Facilities Fire Prevention In-	\$150.00
spections	
Re-Inspection Fee [Fire Prevention]	
First and Second (failed) Inspection	No Charge
Third (failed) Inspection	\$100.00
Fourth (failed) Inspection	\$200.00
Subsequent (failed) Inspections	\$200.00 + \$100 for each additional in-
	spection
Re-Inspection Fee [System Impairment]	
First (failed) Inspection	No Charge
Second (failed) Inspection	\$100.00
Third (failed) Inspection	\$250.00
Fourth (failed) Inspection	\$500.00
Subsequent (failed) Inspections	\$500.00 + \$250 for each additional in-
	spection
Late Fees	
Late Payment Penalty 65	\$25.00

Table 105.1 Other Fees

Other Fees	
After-hours/Standby (per hour, per person)	\$200.00 (two-hour min)
Variance Request	\$500.00
Phasing Plan Review	\$500.00
Expedited Plan Review	.5x Permit Fee (\$500.00 min)
Flow-Test	\$150.00

- Section 4. The North Central Texas Council of Governments Region recommended Amendments to the *International Fire Code*, 2024 Edition, are specifically set out and incorporated into this Ordinance with additional local amendments.
- Section 5. Except as provided in this Ordinance, all ordinances, orders or resolutions heretofore passed and adopted by the City Council of the City of McKinney, Texas, are hereby repealed to the extent that said ordinances, orders or resolutions, or parts thereof, are in conflict herewith.
- Section 6. If any section, subsection, paragraph, sentence, clause, phrase or word of this Ordinance, or the application thereof to any person or circumstance, shall to any extent be held invalid, void or unconstitutional by a court of competent jurisdiction, such holding shall not affect the validity of the remaining portions of this Ordinance, and the City Council hereby declares that it would have passed such remaining portions of this Ordinance despite such invalidity, which remaining portions shall remain in full force and effect.
- Section 7. Any person, firm, partnership, corporation or association violating any provision of this Ordinance or of any code adopted herein shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall be fined in the sum of not more than \$2,000.00, and each day such violation continues shall constitute a separate and distinct violation.
- Section 8. This Ordinance shall take effect and be in full force from and after its passage and publication, as provided by the Revised Civil Statutes of the State of Texas and the Home Rule Charter of the City of McKinney, Texas beginning on October 1, 2025.

DULY PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF MCKINNEY, TEXAS, ON THIS 19TH DAY OF AUGUST, 2025.

	BILL COX Mayor GERÉ FELTUS Mayor Pro Tem
CORRECTLY ENROLLED:	
EMPRESS DRANE, TRMC City Secretary TENITRUS PARCHMAN, TRMC Deputy City Secretary	
DATE:	
APPROVED AS TO FORM:	
MARK S. HOUSER City Attorney ALAN LATHROM Assistant City Attorney	