

AN ORDINANCE OF THE CITY OF LEANDER, TEXAS

ORDINANCE NO. 25-041-00

AN ORDINANCE OF THE CITY OF LEANDER, TEXAS ADOPTING THE 2021 EDITION OF THE INTERNATIONAL FIRE CODE, INCLUDING APPENDICES B, C, D, E, F, G, H, I, K, AND N SAVE AND EXCEPT THE DELETIONS AND AMENDMENTS SET FORTH BELOW, IS HEREBY ADOPTED AS THE FIRE CODE OF THE CITY OF LEANDER, TEXAS, REGULATING AND GOVERNING THE SAFEGUARD OF LIFE AND PROPERTY FROM FIRE AND EXPLOSION HAZARDS ARISING FROM STORAGE, HANDLING AND USE OF HAZARDOUS SUBSTANCES, MATERIALS AND DEVICES, AND FROM CONDITIONS HAZARDOUS TO LIFE AND PROPERTY IN THE OCCUPANCY OF BUILDINGS AND PREMISES IN THE CITY OF LEANDER, TEXAS PROVIDING FOR THE ISSUANCE OF PERMITS AND COLLECTION OF FEES THEREFORE; AMENDING THE FIRE CODE OF THE CITY OF LEANDER IN ENTIRETY AND ALL OTHER ORDINANCES AND PARTS OF THE ORDINANCES IN CONFLICT THEREWITH.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL of the CITY OF LEANDER, TEXAS, THAT:

Section 1. One (1) copy of the 2021 International Fire Code is on file in the office of the City Secretary being marked and designated as the, *International Fire Code*, 2021 edition, including Appendices B, C, D, E, F, G, H, I, K, and N (see *International Fire Code* Section 101.2.1, 2021 edition); as published by the International Code Council, be and is hereby adopted as the Fire Code of the CITY OF LEANDER, TEXAS regulating and governing the safeguard of life and property from fire and explosion hazards arising from storage, handling and use of hazardous substances, materials and devices, and from conditions hazardous to life and property in the occupancy of buildings and premises as herein provided; providing for the issuance of permits and collection of fees therefor; and each and all of the regulations, provisions, penalties, conditions and terms of said Fire Code on file in the City Secretary office of the CITY OF LEANDER, TEXAS 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, prescribed in Section 2 of this ordinance.

Section 2. That the following sections are hereby revised:

Amend:

[A] 101.1 Title. These regulations shall be known as the Fire Code of the CITY OF LEANDER, TEXAS, Hereafter referred to as "this code."

Amend:

101.2 Scope. The provisions of this Code shall supplement any and all laws relating to fire and life safety and shall apply to all persons without restriction, unless specifically

exempted. This Code establishes regulations affecting or relating to structures, processes, premises and safeguards regarding the following:

1. The hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices.
2. Conditions hazardous to life, property or public welfare in the occupancy of structures or premises.
3. Fire hazards in the structure or on the premises from occupancy or operation.
4. Matters related to the construction, extension, repair, alteration or removal of fire protection systems.
5. Conditions affecting the safety of fire fighters and emergency responders during emergency operations.

Amend:

[A] 101.2.1 Appendices. Provisions in the appendices shall not apply unless specifically adopted.

Therefore, the following appendices are adopted as part of this code:

1. APPENDIX-B FIRE-FLOW REQUIREMENTS FOR BUILDINGS
2. APPENDIX-C FIRE HYDRANT LOCATIONS AND DISTRIBUTION
3. APPENDIX-D FIRE APPARATUS ACCESS ROADS
APPENDIX-E HAZARD CATEGORIES
4. APPENDIX-F HAZARD RANKING
APPENDIX-G CRYOGENIC FLUIDS-WEIGHT AND VOLUME
EQUIVALENTS
5. APPENDIX-H HAZARDOUS MATERIALS MANAGEMENT PLAN (HMMP)
AND HAZARDOUS MATERIALS INVENTORY STATEMENT (HMIS)
INSTRUCTIONS
APPENDIX-I FIRE PROTECTION SYSTEMS—NONCOMPLIANT
CONDITIONS
6. APPENDIX-K CONSTRUCTION REQUIREMENTS FOR EXISTING
AMBULATORY CARE FACILITIES
7. APPENDIX-N INDOOR TRADE SHOWS AND EXHIBITIONS

Amend:

[A] 102.1 Construction and design provision. The construction and design provisions of this code shall apply to:

1. Structures, facilities and conditions arising after the adoption of this code.
2. Existing structures, facilities and conditions not legally in existence at the time of adoption of this code.
3. Existing structures, facilities, and conditions when required in Chapter 11 or in specific sections of this code.
4. Existing structures, facilities and conditions that, in the opinion of the *fire code official*, constitute a distinct hazard to life or property.

Amend:

[A] 103.1 General. The Leander Marshal's Office, under the direction of the FIRE CHIEF, is hereby created and the official in charge thereof shall be known as the fire code official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

Amend:

[A] 103.2 Appointment. The Fire Chief is appointed by the City Manager in accordance with the policies and procedures of the City of Leander and in compliance with state law. The Fire Chief shall designate the fire code official.

Amend:

[A] 104.1 General. The fire code official is hereby authorized to enforce the provisions of this code. The fire code official shall have the authority to render interpretations of this code and to adopt policies, procedures, rules, and regulations in order to clarify the application of its provisions and is authorized to develop administrative rules to supplement the requirements of this code and adopt standards referenced by this code. Such interpretations, policies, procedures, rules, and regulations shall be in compliance with the intent and purpose of this code. Such policies, procedures, rules, and regulations shall not have the effect of waiving requirements specifically provided for in this code. Should a conflict occur between this code, a referenced standard, or an administrative rule adopted by the Fire Code Official, the requirements of the administrative rule shall govern.

ADD:

[A] 104.1.1 Authority to Issue Citation. The Fire Chief and members of the fire department assigned to enforce this code are authorized to issue municipal citations and/or summons for violations of this code or related ordinances.

ADD:

[A] 104.3.2 Photographic Documentation. Members of the Fire Department inspecting or making such examinations shall have the right, in compliance with 104.4 of this code, to be authorized to take a reasonable number of photographs, audio, or videotapes for evidence and records for use by the agency to study hazards, scientific control for fire safety, and enforcement of adopted codes and ordinances.

ADD:

[A] 104.8.3 Third Party Plan Reviews. The Fire Code Official may require any plans submitted to be reviewed by an outside professional engineer or appropriate specialist when, in the opinion of the code authority, there exists special technical knowledge to conduct a satisfactory review of the plans, and such special knowledge is not available among the agency staff.

Amend:

[A] 104.10 Alternative materials, design, and methods, construction, and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the fire code official finds that

the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. Where the alternative material, design or method of construction is not approved, the fire code official shall respond in writing, stating the reasons why the alternative was not approved.

The owner, lessee, or a representative shall apply for approval of an alternate material or method in writing, detailing the specifics of the alternate materials or methods including evidence of equivalence with the prescribed requirements of the Fire Code. If the alternative means or methods involves matters regulated by the Building Code, the alternative means or methods is also subject to the approval of the Building Official.

ADD:

104.11.4 Removal of debris and rubble after fire.

1. The owner or person having under his control or in his possession upon any premises in the City, any materials or substances which have been rendered useless or unmerchantable by reason of any fire on such premise, or any debris resulting from such fire, must remove such substances and debris from the premises within 48 hours after notice to do so has been served by the Fire Chief or Building Official, or designee.
2. Whenever any building or other structure in the City is partially burned, the owner or the person in charge or control thereof shall, within 10-days after notice has been provided by the Fire Chief or Building Official, remove all refuse, debris, charred and partially burned lumber and material from the site. If such building or other structure is burned to such an extent that it is rendered incapable of being repaired, the owner of the property upon which structure is located, or person in charge or control thereof, shall within ten days after notice has been provided by the Fire Chief or Building Official, remove all the remaining portion of the building or structure, from the site.
3. The Fire Chief may extend the 10-day period of removal of such burned or partially burned buildings when the insurance adjustment, if any, is still pending, or a plan of action is submitted and accepted by the fire code official and Building Official.

Amend:

105.3.1 Expiration. An operational permit shall remain in effect until reissued, renewed or revoked, or for such a period of time as specified within the permit. Construction permits are issued and administered consistent with the Building Code and associated permitting process. Unless otherwise provided in the Fire Code, permits are not transferable and any change in occupancy, operation, tenancy or ownership shall require that a new permit be issued.

Amend:

105.5 Required Operational Permits. The fire code official is authorized to issue operational permits for the operations set forth in Sections 105.5.2 through 105.5.54.

ADD:

105.5.34 Open Burning. An operational permit is required for the kindling or maintaining of trench burn operations or an open fire as allowed by Section 307 of this code or the adopted codes of ordinances. Instructions and stipulations of the permit shall be adhered to. Operational permits for recreational fires associated with events will be issued on an as-needed basis. Permits shall only be presented by, and permits issued to, the owner of the land upon which the fire is to be kindled.

Exception: Recreational fires *Recreational* fires as approved and allowed by city ordinance and adopted codes.

ADD:

105.5.34.1 Commercial burn permits. Commercial burn permits will be issued to the name of the company that will be responsible.

ADD:

105.5.53 Food Booths. An operational permit is required for the operation of a food booth as required by Section 320.

ADD:

105.5.54 Mobile Food Establishments. A vehicle mounted, self or otherwise propelled, self-contained food service operation, designed to be readily moveable (including, but not limited to, catering trucks, trailers, push carts, and roadside vendors) and used to store prepare, display, serve or sell food, as determined by the fire code official. An operational permit is required for the operation and maintenance of a mobile food establishment. For permit to operate a mobile food establishment, see section 321.

ADD:

105.6.25 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 for 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 to be a modification and does not require a permit.

Amend:

[A] 106.2.4 Approved documents. *Construction documents approved by the Fire Code Official are approved* with the intent that such *construction documents* comply in all respects with this code. The issuance or granting approval of plans and specifications or other construction documents is not an approval of any violation of this Code or of any other ordinance of the jurisdiction. An approval presuming to give authority to violate or cancel the provisions of this Code is not valid. Review and approval by the fire department shall not relieve the applicant of the responsibility of compliance with this code. The issuance of an approval based on plans, specifications and other data shall not prevent the *Fire Code Official* from requiring the correction of errors in the plans, specifications or

other data, or from preventing processes, building operations or uses in violation of this code or any other code of this jurisdiction.

DELETE:

107.3 Permit Evaluations. {DELETE in its entirety}

Amend:

[A] 107.4 Work commencing before permit issuance. A person who commences any work, activity, or operation regulated by this code before obtaining the necessary permits shall be subject to a notice of violation and enforced as provided for in section 112.3 of this code. Any penalties assessed due to the enforcement under this code shall be in addition to the required permit fees.

Amend:

[A] 111.1 Board of Adjustments. In order to hear and decide appeals of orders, decisions or determinations made by the *Fire Code Official* relative to the application and interpretation of this code, there shall be an Office of Board of Adjustments. The Board of Adjustments shall be in accordance with Sec. 3.01.014 of the City of Leander Code of Ordinances.

DELETE:

[A] 111.3 Qualifications. {DELETE in its entirety}

Amend:

112.4 Violation Penalties. Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official or of a permit or certificate caused under the provisions of this code shall be subject to the penalties and enforcement actions as set forth in the City of Leander Code of Ordinances, and any relevant Chapters, Articles, or Sections therein.

Amend:

[A] 113.2 Issuance. The fire code official, or the fire code official's designee, may issue a stop work order by serving notice in writing to the property owner, the owner's authorized agent, or any person(s) performing or causing the work to be performed. The stop work order shall state the reason for the order and the conditions under which the cited work is authorized to resume. Upon issuance of the stop work order, all cited work or construction on the property shall cease immediately and shall not resume until authorized by the fire code official or their designee. The notice shall be posted on the property in a conspicuous location that is reasonably visible to anyone performing work on the site.

Amend:

[A] 113.4 Failure to Comply. Any *person* who continues any work after having been served with a stop work order, except such work as that *person* is directed to perform to remove a violation or unsafe condition, shall be liable to provisions outlined by the City of Leander Ordinances, Sec. 1.01.009 and associated Chapters, Articles and/or Sections.

ADD:

114.2.1 Removal of Occupants. A member of the Fire Department is authorized to require the removal of occupants at a location when actual occupancy load exceeds the permitted or posted occupant load. A person commits an offense if they refuse to obey an order to vacate.

ADD or Amend:

202 Definitions.

ACCESS ROADWAY. Any road(s) providing access around the perimeter of any building, to a building from a public street, or to a building or its fire department connection from a required fire hydrant.

ALL WEATHER DRIVING SURFACE. Hot mix asphaltic concrete or concrete pavement as per City of Leander Standard Specifications or other alternative roadway methods approved by the fire code official.

ANIMAL HOUSING OR CARE FACILITY. Facilities used for temporary or permanent housing of animals for the purpose of providing a service, participating in a sport, or for providing general board and care. Animal housing or care facilities do not include animal or pet care by pet owner carrying for their own animals at their owned or rented residential property, horse stables, facilities used for equestrian purposes, and these facilities do not include Group U agricultural uses for the care and feeding of the agricultural business owner's personal livestock.

[B] 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 or staff has accepted responsibility for care recipients already incapable. This group may include, but not be limited to:

- Dialysis centers
- Procedures involving sedation
- Sedation dentistry
- Surgery centers
- Colonic centers
- Psychiatric centers

[BG] ATRIUM. A vertical space that is closed at the top, connecting two or more stories in Group I-2 and I-3 occupancies or three or more stories in all other occupancies. Stories, as used in this definition, do not include balconies within assembly groups or mezzanines that comply with Section 505 of the International Building Code.

AUTOMATIC EXTERNAL DEFIBRILLATOR (AED). A device that meets or exceeds the requirements of the Texas Health and Safety Code and applicable federal law, as amended used to automatically analyze the heart rhythm and, if it detects a problem that

may respond to an electrical shock, permits a shock to be delivered to restore a normal heart rhythm.

BED AND BREAKFAST. A private residence having a limited number of sleeping rooms which are available for transient guests who have paid for accommodations.

CONSTANT SUPERVISION. For Group B Animal Housing or Care Facilities, constant supervision is defined as a facility with 24-hour on-site staff capable of responding to problems or emergencies that could impact the safety or lives of the animals being housed or cared for.

COOKING FIRE. Means an outdoor fire where fuel (wood, charcoal, natural gas or liquefied petroleum gas) is used in preparation of food prior to consumption. Fuel being burned is contained in a barbeque grill, barbeque pit, fire ring or a similar container. The process of burning wood to create coal will be considered as part of the cooking process.

[BE] **DEFEND-IN-PLACE.** A method of emergency response that engages building components and trained staff to provide occupant safety during an emergency. Emergency response involves remaining in place, relocating within the building, or both, without evacuating the building.

DRIVEWAY, ONE- TWO- FAMILY. A vehicular ingress or egress route that serves no more than two buildings or structures, not including accessory structures, or not more than five dwellings.

EXTENSION CORD AND FLEXIBLE CORD: Flexible cord of any length which has one male electrical connector on one end and one or more female electrical connectors on the other end.

FIRE APPARATUS ACCESS ROAD. A road that provides fire apparatus access from a fire station to a facility, building or portion thereof. This is a general term inclusive of all other terms such as fire lane, fire zone, public street, private street, parking lot lane and access roadway.

FIRE LANE AND FIRE ZONE. A road, an off-street area, or other passageway developed to allow the passage of fire apparatus that is designated in accordance with adopted jurisdictional regulations and this code, that is to remain free and clear of parked or standing vehicles in order to provide access to buildings, processes, storage areas or fire appliances in case of fire or other emergency. A fire lane is not necessarily intended to be used by vehicular traffic other than fire apparatus.

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 purposes of identifying and controlling fire hazards, detecting early signs of unwanted fire, raising an alarm of fire and notifying the fire department.

FOSTER CARE FAMILY HOME. shall mean a single independent residential occupancy that is the primary residence of the caregiver and licensed by the state to provide twenty-four (24) hour care for 6 or fewer children (including those related to the caregiver) up to the age of eighteen (18) years.

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. Where 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 classified as a group S Occupancy or Speculative (shell) Building exceeding 5,000 sq. ft. that has a clear height more than 14 feet (4267 mm), making it possible to be used for storage more than 12 feet (3658 mm), shall be considered to be high-piled storage. When a specific product cannot be identified (speculative warehouse), a fire protection system and other required life safety features shall be installed as for Class IV commodities, to the maximum pile height.

KEY BOX AND KNOX® BOX. A secure device with a lock operable only by a fire department master key and containing building entry keys and other keys that may be required for access in an emergency.

MAINTENANCE AGREEMENT. A contractual agreement between a building owner and a licensed or registered firm to perform general maintenance work to life safety or fire protection or detection systems including, but not limited to, upgrades to an existing system that do not include modification to the existing system configuration and repair of fault conditions. Such an agreement may include provisions for testing and inspection in accordance with appropriate standards.

MOBILE FOOD ESTABLISHMENT. For the purposes of this code's enforcement and considering existing definitions within the City of Leander Code of Ordinances, a "Mobile Food Establishment" is any operation involving heat-producing equipment utilized for the cooking, frying, or warming of food products intended for consumption. Such operations shall occur from a motorized vehicle, towable trailer, watercraft, or any similar conveyance.

MONITORING AGREEMENT. A contractual agreement between a building owner and a licensed or registered firm to provide monitoring service when required. Such service shall include either remote or central service.

[BG] GROUP B, BUSINESS. Business Group B occupancy includes, among others, the use of a building or structure, or a portion thereof, for office, professional or service-type transactions, including storage of records and accounts. Business occupancies shall include, but not be limited to, the following:

Airport traffic control towers

Ambulatory care facilities

Animal Housing or Care Facilities, including shelters, breeding, grooming, daycare, hospitals, kennels and pounds

**The balance of the remaining list is unchanged*

SELF-SERVICE STORAGE FACILITY. Real property designed and used for the purpose of renting or leasing individual storage spaces to customers for the purpose of storing and removing personal property on a self-service basis.

STANDBY PERSONNEL. Qualified fire service personnel, approved by the Fire Chief. When utilized, the number required shall be as directed by the Fire Chief. Charges for utilization shall be as normally calculated by the city adopted fees.

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

ADD:

302.1 Definitions.

Automatic External Defibrillator (AED)

ADD:

304.2.1 Land Clearing. Combustible waste piles shall be stored in accordance with local adopted codes of ordinances. Vegetation clearance requirements shall be in accordance local adopted Subdivision Ordinance and applicable codes.

ADD:

304.2.2 Temporary Storage of piles. Individual waste piles shall not exceed 10 feet (3048 mm) in height or 1,000 cubic feet (29 m³) in volume. Piles shall not be stored longer than a period exceeding 30 days, or as otherwise restricted by the adopted code of ordinances.

Exception: Piles are being stored in accordance with an *approved* local agreement or similar instrument.

Amend:

307.1.1 Prohibited Open Burning. *Open burning* shall be prohibited when atmospheric conditions or local circumstances make such fires hazardous. It shall be unlawful for any person within the city limits, in anyway, to intentionally, knowingly or carelessly burn or cause to be burned any combustibles, including but not limited to grass, weeds, timber, rubbish, leaves, or other natural or synthetic materials, garbage, trash, rubbish, litter, solid waste, hazardous waste or any such like substances on any street, alley, lot or premises. Such prohibited fires shall include bonfires and fires used for ceremonial purposes not in compliance herewith.

Exceptions:

1. Burning conducted for the purposes of outdoor cooking and warming in a device *approved* for such purpose and in compliance with this code. No burning of waste, garbage, or other prohibited items as referenced by state, local law, or regulations, shall be permitted in such devices.
2. Firefighter training conducted under the supervision of the *Fire Code Official*, or designee.
3. On-site land clearing on lots of greater than two acres upon which the private owner, non-commercial intent, intends to clear the lot itself of selected trees, brush and other natural plant growth and when *approved* by the *Fire Code Official*, or designee, and the onsite land clearing is conducted in compliance with state, federal and local laws and regulations. A permit shall be required and *approved* safety measures shall be employed in accordance with 105.6.
4. Prescribed burning for the purpose of reducing the impact of wildland fire when authorized by the Fire Code Official. A permit shall be required and *approved* safety measures shall be employed in accordance with 105.5 and 307.2.

Amend:

307.2 Permit required. A permit shall be obtained from the *fire code official* in accordance with section 105.5, prior to kindling a fire for recognized silvicultural or range or wildlife management practices, prevention or control of disease or pests, trench burning or *approved* open burn operation in accordance with Section 307.1.1 of this code. 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 Natural Resource Conservation Commission guidelines or restrictions.
2. State, county or local temporary or permanent bans on open burning.
3. Local written policies as established by the Fire Marshal.

307.2.1 Authorization. All outdoor burning shall be done in accordance with Texas Outdoor Burning Rules. If a conflict should arise between this code and the Texas Outdoor Burning Rules, then the more stringent rule shall apply. Where required by state or local law or regulations, *open burning* shall only be permitted with prior approval from the state or local air and water quality management authority, provided that all conditions specified in the authorization are followed.

ADD:

307.2.2 Limiting conditions for conducting open burning. Open burning shall be commenced and conducted only when wind direction and other meteorological conditions are such that smoke and other pollutants will not cause adverse effects to any public road, landing strip, navigable water, or off-site structure. Ignition shall not begin when surface wind speed is predicted to be less than six miles per hour (MPH) or greater than 23 MPH during the burn period. With the exception of bonfires, cooking fires, recreational fires, and exterior fireplace fires, permitted fires shall not be ignited prior to sunrise and shall be extinguished, out cold, prior to sunset. All Texas Commission on Environmental Quality (TCEQ) rules shall apply to permitted open burning.

Amend:

307.3 Extinguishment authority. Where open burning creates or adds to a hazardous situation, adversely affects public health, 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.

Amend:

307.4 Location. When authorized by permits in accordance with section 105.6 and 307.2, unless otherwise *approved* by the *Fire Code Official*, the location for burning shall not be less than 300 feet (91 440 mm) from any structure and provisions shall be made to prevent the fire from spreading to within 300 feet (91 440 mm) of any structure. Such fires shall be constantly attended by a competent person with an *approved* means to extinguish the fire and reliable communication capabilities.

Exceptions:

1. Fires in *approved* containers that are not less than 8 feet (2438 mm) from a structure.
2. The minimum required distance from a structure shall be 25 feet (7620 mm) where the pile size is 3 feet (914 mm) or less in diameter and 2 feet (610 mm) or less in height.
3. Operation of a trench burner, or similar operation, shall be in accordance with Section 307.6.

Amend:

307.4.1 Bonfires. A bonfire shall not be conducted within 300 feet (91 440 mm), or greater distance as determined by the fire code official, from any structure or combustible material unless the fire is contained in a barbecue pit or other commercially designed container intended for such use. Conditions that could cause a fire to spread within 300 feet (91 440

mm) shall be eliminated prior to ignition. The fuel load of a bonfire shall be of a manageable size, not to exceed a 10-foot by 10-foot area.

ADD:

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.

ADD:

307.6 Trench Burns. Trench burns shall be conducted in air curtain trenches and in accordance with this section.

307.6.1 Construction. The trench burner shall be located at the center of a circle three hundred feet in diameter, in which no combustible matter will be located or stored, except for the pile of combustible debris which has been readied for loading into the trench burner pit, except as otherwise provided by law.

1. Pertaining to trees, landscaping, erosion, drainage, or run-off control the surface of the land within the circle shall be cleared of any high grasses, and any trees, brush, and weeds.
2. The pit must be built in the ground and not above grade.
3. The dimensions of the pit shall be 14 feet wide, 40 feet long, and at least 10 feet deep, except in cases where a permit issued to the applicant by the Texas Commission on Environmental Quality (TCEQ) prescribes different dimensions. The ash generated by the operation of the trench burner shall be removed from the trench as necessary to maintain a minimum trench depth of 10 feet.
4. The pit, air blower or fan, and other operating equipment shall be securely enclosed by a locked gate and security fence of a minimum height of 8 feet which completely surrounds the pit and equipment at all times when the trench burner is unattended. The top portions of the fence shall consist of at least three runs of barbed wire. The fencing shall not be removed until the pit is closed and filled. An *approved* Fire Department key lock shall be required to secure the gate.

307.6.2 Location. A trench burner must not be located within 500 feet from any recreational area, building or structure, not occupied or used solely by the owner, and 300 ft. from any property line on which the trench burner is constructed.

307.6.3 Hours of Operation. The hours of continuous loading operation shall be between 8:00 a.m. and 4:00 p.m. Trench burners may not be operated on legal holidays and in accordance with the State of Texas requirements for trench burns; Regulation I, Subchapter B, 111, of the Texas Commission on Environmental Quality.

1. The blower or fan will be allowed to operate an additional two hours from 4:00 p.m. to 6:00 p.m. to ensure cool down after its period of continuous loading operations.
2. No combustible material may be added to the fire between 4:00 p.m. of one day and 8:00 a.m. of the following day.
3. The hours of operation may be changed by the *Fire Code Official* when unusual atmospheric conditions exist.
4. No burning is permitted when air stagnation advisories are in effect for the area in which the mobile incinerator is located.
5. No burning is permitted during periods of high fire hazard weather conditions.

307.6.4 Method of Operation. Material to be burned is limited to trees, brush, untreated waste lumber, shrubs, roots, bushes, and all untreated wood waste cleared from the site described in the permit application. Combustible debris cleared from other sites may not be burned in the trench burner.

1. All other materials, including but not limited to paper, roofing, shingles, insulation, wiring, treated wood products, metal products, chemicals, plastics, tires and other real or synthetic rubber materials may not be burned in the pit. Flammable or combustible liquids may not be burned except for ignition purposes.
2. Suitable fire protection shall be present on the site where the trench burner is located during operation. Suitable fire protection shall consist a minimum of one portable fire extinguisher having a minimum 4-A rating and other *approved* on site fire extinguishing equipment, such as dirt, sand, water barrel, or water truck and shall be available for immediate utilization at all times burning is conducted.
3. Combustible material may not be placed in the trench any higher than three feet below the surface level.
4. Every trench burner must be attended when in operation by a competent person with reliable means of communication.
5. The trench burner shall be completely extinguished before nightfall or being left unattended.
6. The pit must be closed and filled with dirt within 48 hours after the trench burner operations are discontinued.
7. The person responsible for burning under this authorization shall notify the Leander Fire Department each day before burning is started. If the Department refuses permission, no burning shall be allowed that day.
8. A site inspection shall be requested once the site is prepared. The Leander Fire department will provide written authorization to begin event following inspection of the site and equipment.

307.6.5 Permit Application. The permit application must contain the following:

1. The name, address, and phone number of the individual or entity that owns the trench burner unit.

2. The name, address, and phone number of the individual or entity responsible for the operation of the trench burner unit.
3. A description of the site to be cleared, and the name, address and telephone number of owner of the property.
4. An operating schedule including initial date of operation and expected number of weeks of operation.
5. A copy of the Texas Commission on Environmental Quality permit issued for the construction of the unit, if a permit is required.
6. A description of the type and quantity of petroleum product utilized to ignite the trench burner. If this is to be stored at the site, then the manner of storage and quantity to be stored must be described. The method of igniting the trench burner must be described.
7. Proof that the applicant has current liability insurance in the amount of \$1,000,000 for personal injuries, and \$500,000 for property damage any time the trench burner is in use.
8. A construction permit from the Texas Natural Resource Conservation Commission must be obtained if required by Commission rule. If the trench burner is exempt from the Commission permit requirements all conditions of the exemption must be complied with.

Amend:

308.1.4 Open-flame cooking devices. Charcoal burners and other open-flame cooking devices shall not be operated on combustible balconies or within 10 feet (3048 mm) of combustible construction.

Exceptions:

1. 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. LP-gas cooking devices having LP-gas container with a water capacity not greater than 21/2 pounds [nominal 1 pound (0.454 kg) LP gas capacity].

Amend:

308.1.6.2 Portable fueled open-flame devices. Portable open-flame devices fueled by flammable or combustible gases or liquids shall be enclosed or installed in such a manner as to prevent the flame from contacting combustible material.

Exceptions:

1. LP-gas-fueled devices used for sweating pipe joints or removing paint in accordance with Chapter 61.
2. Cutting and welding operations in accordance with Chapter 35.
3. Torches or flame-producing devices in accordance with Section 308.1.3.
4. Candles and open-flame decorative devices in accordance with Section 308.3.

Amend:

308.1.6.3 Sky Lanterns. A person shall not release or cause to be released a tethered or untethered, unmanned free-floating device containing an open flame or other heat source, such as but not limited to a sky lantern.

ADD:

308.5 Fire Hazard Prohibited. In Group R-1 and R-2 occupancies, a person shall not construct, erect, install, maintain or use any incinerator or barbecue pit or grill or so burn any combustible material as to constitute or occasion a fire hazard by the use or burning thereof or as to endanger the life or property of any person thereof.

The use or burning of any such devices under the following conditions shall constitute a fire hazard and is strictly prohibited:

1. Within 10 linear feet (3048 mm) of any combustible surface or material, including but not limited to decks, porches, balconies, walls, or verandas.
2. Beneath any balcony, porch, roof overhang, deck, or veranda.

Amend:

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 114 of this code relating to structural or interior hazards, shall be marked as required by Section 311.5.1 through 311.5.5.

ADD:

SECTION 322 AUTOMATIC EXTERNAL DEFIBRILLATOR

322.1 General. All buildings that have occupied floors located greater than 75' (22 860mm) above the lowest level of fire department access or have an aggregate area greater than 15,000 ft² (1394 m²) or occupancy load over 300 shall have at least 1 Automated External Defibrillator (AED) readily accessible installed in an *approved* location.

Exceptions: The provisions of this section shall not apply to the following buildings and structures:

1. Airport traffic control towers in accordance with 2021 International Building Code.
2. Open parking garages in accordance with 2021 International Building Code.
3. Buildings with an occupancy classified as Group A-5 in accordance with 2021 International Building Code.
4. Low-hazard special industrial occupancies in accordance with 2021 International Building Code.
5. Buildings with an occupancy classified as Group H-1, H-2 or H-3 in accordance with 2021 International Building Code.

322.2 Type. All AEDs used must be of the type *approved* by the United States Food and Drug Administration (FDA).

322.3 Accessibility. All AEDs must be available for public use.

1. All AEDs installed in a multiple story building shall be located in the elevator lobby unless otherwise *approved* by the *fire code official*.
2. All AEDs located in a building without an elevator lobby should be installed in a visible and accessible location *approved* by the *Fire Code Official* or designee.
3. Standard industry accepted signs shall mark the location of each AED.
4. All mounted AEDs shall meet the installation requirements as outlined by the ADA Accessibility Guidelines (ADAAG)

319.3.1 Notifying Emergency Medical Services Providers. Upon acquisition of an AED, the person or entity shall notify the Fire Department in writing of the existence, location, and type of AED.

322.4 Maintenance. All AEDs shall be maintained and tested according to manufacturer recommendations.

1. Maintenance records shall be kept for a period of 1 year.
2. Disposable supplies (Defibrillation pads) shall be replaced upon their expiration date or following use.

ADD:

SECTION 323 FOOD BOOTHS

323.1 Permits. For permit to operate a food booth, see Section 105.6.49. It shall be unlawful to operate a food booth without a permit.

323.2 Fire Extinguishers. One 2A –10BC fire extinguisher shall be required for all food booths. Booths containing deep fat fryers shall have a Class K portable fire extinguisher for up to four fryers having a maximum cooking medium capacity of 80 pounds each. For every additional group of four fryers having a maximum cooking capacity of 80 pounds each, an additional Class K extinguisher will be required. For individual fryers exceeding 6 square feet in surface area, Class K extinguishers will be installed in accordance with manufacturers' recommendations. All fire extinguishers shall have a current (within a year) inspection sticker from a licensed extinguisher company.

323.3 Location. Food booths utilized for cooking shall have a minimum of 10 feet of clearance on two sides. Booths shall not be placed in fire lanes unless otherwise *approved* by the *fire code official*. Booths shall not be placed within 10 feet of amusement rides or devices.

323.4 Cooking equipment location. Barbeque pits shall not be located within 10 feet of combustible materials. Barbeque pits shall not be located under the food booth canopy.

323.5 Acceptable Cooking Sources. The following are the only approved cooking sources for food booths:

1. Wood or charcoal
2. Propane
3. Natural Gas
4. Electricity

323.6 Generators. Fuel tanks shall be of adequate capacity to permit uninterrupted operation during normal operating hours. Generators shall be isolated from contact with the public. Storage of gasoline is not allowed in or near generators or food booths.

323.7 Decorations. All decorative material shall be at least 6 feet away from any open flame, cooking element, or heat source or be flame resistant.

323.8 Escape route. All concession stands shall have a minimum of a 3-foot, or 36 inches, aisle for emergency escape.

323.9 Propane. All equipment used in conjunction with propane tanks must be UL Listed for the purposes in which they will be used. Tanks shall be secured to prevent falling. Tanks shall only be white or aluminum in color. Only one spare tank will be allowed in a food booth. Emptied propane tanks are to be removed from the site immediately after use. Regulators shall be attached as close as possible to the tanks. Leaks can be detected using a soap and water solution. Tank shutoff valves and/or additional shutoff valves shall be accessible and away from the cooking appliance(s). Propane tanks shall not be within 5 feet (1524 mm) of an ignition source. Propane tanks shall not be located within 10 feet (3048 mm) of a building door or window.

323.10 Area. A food booth shall consist of a 10-foot by 10-foot area (100 square feet). Extended food booths that exceed this dimension, and used for cooking, will be charged additional fees.

ADD:

SECTION 324 MOBILE FOOD ESTABLISHMENTS

324.1 Permits. Permits shall comply with Sections 324.1.1 through Section 324.1.2

324.1.1 Compliance. It shall be unlawful to operate mobile food establishments without a permit as required by Section 5.03.002, part 105.6.54 of the adopted Leander Code of Ordinances.

324.1.2 Applicability. Mobile food establishments left on site for more than one hour at carnivals, fairs, festivals, or other public events will be subject to Food Booth permit requirements, the requirements set forth in the adopted Leander Code of Ordinances, the requirements of Travis/Williamson County Health District(s) and associated inspections and fees as set forth in this code.

324.2 Fire Protection. All medium-duty, heavy-duty, and extra-heavy-duty cooking appliances located within the food establishment, or as otherwise required by the adopted

Leander Codes of Ordinances, shall comply with the International Mechanical Code, Building Code, and other applicable ordinances.

324.2.1 Fire Extinguishers. Fire extinguishers are required in mobile food establishments in accordance with sections 324.2.1 through 324.2.4

324.2.1 Location. All mobile food vendors shall have at minimum one (2A-10BC) portable fire extinguisher mounted in a conspicuous place within the kitchen area.

324.2.2 Additional fire extinguishers. Mobile food vendors with portable generators shall have a (3A-40BC) portable fire extinguisher in addition to the other fire extinguishers.

324.2.3 Fire extinguisher Inspections. All portable fire extinguishers shall be serviced, inspected, and tagged annually by a licensed fire extinguisher company.

324.2.4 Frying operations. In addition to any other required fire extinguisher, all mobile food vendors with deep fat frying operations shall have a Class K portable fire extinguisher for up to four (4) fryers with a maximum cooking medium capacity of 80 pounds each. An additional Class K extinguisher will be required for every group of four (4) fryers with a maximum cooking capacity of 80 pounds each. For individual fryers exceeding six (6) square feet in surface area, Class K extinguishers shall be installed in accordance with manufacturers' recommendations.

324.3 Use of LPG. Liquefied Petroleum Gas (LPG) usage shall comply with sections 324.3.1 through 324.3.5.

324.3.1 Containers. LPG containers shall be located and secured on the exterior of the mobile food establishment, open to atmosphere or if containers are kept in compartment, the compartment must be separate from the interior food preparation area. Access must be from the exterior of the unit and compartment floor and the exterior door must be vented to the atmosphere.

324.3.2 Signage. All mobile units with propane shall post a "NO SMOKING" sign next to or directly above the propane bottle and visible to the public. Such sign shall be posted with a minimum of four-inch (4) lettering.

324.3.3 Piping and Appurtenances. Any hose used to pipe LPG to a device shall be listed by UL, FM, or other *approved* agency and listed specifically for LPG service. All couplings, fittings, and any other devices shall meet the requirements for LPG Service as outlined in the International Fuel Gas Code, NFP A 58 and 54, or be unapproved and removed from service.

324.3.4 LPG tanks outside. LPG tanks shall be located outside the mobile food establishment a minimum of 5 feet(1524 mm) from the primary means of egress.

324.4 Baffles and Closures. Baffles and closures shall comply with Sections 324.4.1 through Section 324.4.2.

324.4.1 Required separation. All deep-fat fryers shall have a steel baffle between the fryer and surface flames of an adjacent appliance or shall maintain a 16-inch (407 mm) separation distance. The baffle, if installed, shall be 8-inches (127 mm) in height.

324.4.2 Closure lid. A positive closing lid shall be required on the fryer with latching mechanisms that secure it in the open and closed positions.

Exception: fryers installed under a fixed pipe extinguishing system.

324.5 Emergency Egress. Emergency egress shall comply with Sections 324.5.1 through Section 324.5.2.2.

324.5.1 Clearance. Mobile food establishments shall have a clear, unobstructed height over the aisle-way portion of the unit of at least 74 inches (1880 mm) from floor to ceiling, and a minimum of 30 inches (762 mm) of unobstructed horizontal aisle space.

324.5.2 Travel distance. Should travel distance from any portion of the interior exceed 10 feet (3048 mm), the mobile food establishments shall have a minimum of two (2) exits located remote from each other and so arranged as to provide a means of unobstructed travel to the outside of the vehicle.

324.5.2.1 Secondary egress. A secondary means of egress shall be located remote from the main exit door, with an unobstructed minimum passage of 24 inches by 24 inches to the outside. The bottom of this secondary means of egress shall not be more than 4 feet (1220 mm) above the vehicle floor or a readily accessible horizontal surface capable of supporting a weight of 300 pounds minimum opening to the outside.

324.5.2.2 Lock and signage. The latch mechanism of any exit facility shall be operable by hand and shall not require the use of a key or special knowledge for operation from the inside. The secondary exit shall be labeled "EXIT" in 2-inch minimum letters on a contrasting background.

324.6 Generator Refueling. Refueling of generators shall be performed in an approved location not less than 20 feet (6096mm) from the mobile food establishment. Fuel shall be stored in a UL or FM approved flammable liquid safety container in an approved location. Generators shall be grounded in an approved method. Generators shall not be refueled in areas occupied by the public.

Amend:

405.5 Time. Drills shall be held at unexpected times and under varying conditions to simulate the unusual conditions that occur in case of fire.

Exceptions:

1. In severe climates, the fire code official shall have the authority to modify the emergency evacuation drill termination points and frequency.
2. In Groups I-1, I-2, I-3 and R-4, where staff-only emergency evacuation drills are conducted after visiting hours or where care recipients are expected to be asleep, a coded announcement shall be an acceptable alternative to audible alarms.
3. Notification of teachers or staff having supervision of light- or sound-sensitive students or occupants, such as those on the autism spectrum, for the protection of those students/occupants, shall be allowed prior to conducting a drill.

ADD:

501.3.1 Site Plan. The owner or owner's authorized agent shall be responsible for the development, implementation and maintenance of an approved written site safety plan in accordance with Section 3303. The Site Safety Plan shall be submitted with the permit application for construction documents. Plans must be reviewed and approved by the fire code official, or designee, before a building permit is issued. The Site Safety Plan shall be drawn to scale (no less than 1:60) and shall show and include, but not be limited to, the following:

1. Compass reading.
2. Property and/or lot lines.
3. Street frontages.
4. Location of all buildings (existing and proposed).
5. Fire apparatus access roads (i.e., fire lanes, aerial apparatus access roads) to buildings. Fire lanes shall be highlighted and shall include dimensions (width, turning radii, clearance to overhead obstructions, etc.). The plans shall also show dimensions and calculations for evaluation of compliance with Section D105.3, Proximity to building.
6. Fences, gates, walls, streams and other obstructions to firefighter access.
7. Location of all fire hydrants (existing and proposed). This shall include the direction and the distance to all hydrants not shown on the site plan, but within 1,000 feet of the building to be protected.
8. Size (diameter and length) and locations of all fire main piping (proposed and existing). The pressure class and type of new pipe to be installed shall be identified.
9. The location, type, and size of backflow prevention devices, where installed.
10. Number of lanes, including turning lanes, of all adjacent streets and the location of medians as applicable.
11. Location of all automatic sprinkler and standpipe risers.
12. Location of Fire Department connection(s).

13. Size, type, and location of valves including post indicator valve (if they are located in a pit), control room automatic sprinkler system shut-off, etc.
14. Other water supplies.
15. Where required, type of protection from collision that may cause
 - a. Physical damage to fire protection equipment

Amend:

501.4 Timing of installation. Where fire apparatus access roads or a water supply for fire protection are required to be installed for any facility, building, or site development, such protection shall be installed, tested, and approved prior to and during the time which construction has progressed beyond completion of the foundation of any facility or building. Temporary address identification and street signs shall be installed at each street intersection where construction of new roadways allows passage by vehicles in accordance with Sections 505.1 and 505.2.

ADD/Amend:

502.1 Definitions.

ACCESS ROADWAY.
FIRE LANE AND FIRE ZONE.
KEY BOX AND KNOX BOX.

Amend:

503.1 Where required. Fire apparatus access roads shall be provided and maintained in accordance with Sections 503.1.1 through 503.1.7 and Appendix D.

ADD:

503.1.4. Maintenance.

1. It is unlawful for the owner or responsible party to fail to keep the markings of the fire lane legible, as required by this Code.
2. It is unlawful for the owner or responsible party of the property with a designated fire lane to fail to maintain the lane's surface in acceptable condition, ensuring it is free of potholes and other obstructions.
3. Fire Code Official, or designee, must report any substandard surface conditions, markings, or signs to the property owner or responsible party where a fire lane is designated. The report shall provide instructions on bringing conditions, markings, or signs into compliance as per this Code.

ADD:

503.1.5 Other fire lanes. The fire code official is authorized to establish other fire lanes as deemed necessary for the safe and adequate movement of emergency vehicles throughout the site.

ADD:

503.1.6 Fire lanes near fire stations. Fire lanes shall be established to prohibit parking within 20 feet of the driveway entrance to any fire station and on the side of the street opposite the entrance to any fire station within 75 feet of said entrance.

ADD:

503.1.7 Fire Lane violations. It shall be unlawful for any owner, manager, or person in charge of any premises to abandon or obstruct a fire lane without written permission from the fire code official.

Amend:

503.2 Specifications. Fire apparatus access roads shall be installed and arranged in accordance with Sections 503.2.1 through 503.2.8 and Appendix D.

Amend:

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), 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 (4 267 mm).

Amend:

503.2.2 Authority. The fire code official shall have the authority to require or permit modifications to 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.

Amend:

503.2.3 Surface. Fire apparatus access roads shall be designed and maintained to support the imposed loads of 85,000 lbs. for emergency response apparatus and shall be surfaced so as to provide all-weather driving capabilities using either asphalt or concrete surfaces. All fire apparatus roads and designated fire lanes must comply with the maintenance requirements of 503.1.4.

ADD:

503.2.3.1 Alternative driving surface. Drivable grass surfaces, or other alternative drivable surfaces, are permitted when approved by the fire code official, or designee, and in accordance with all of the following conditions:

1. Sealed documents indicating compliance with the provisions of Section 503.2.3 shall be submitted by a registered design professional for review.
2. The drivable grass surface, or alternative drivable surface, shall not be used as the primary access to the site unless approved by the fire code official.
3. The surface shall be capable of supporting the imposed load of fire apparatus weighing at least 85,000 pounds. A geotechnical design report shall also be submitted, stating core samples were taken and analyzed to meet the weight bearing requirement.

4. Blue reflectors shall be provided on roads to indicate fire hydrant location. Vegetation on and surrounding the surface shall be maintained such that required reflectors are always visible.
5. Fire lane signage meeting the requirements of this Code shall also be provided.
6. Sod is not permitted to be placed over the drivable base.
7. If the surface proposed is to be used as the aerial apparatus access road for the facility, concrete curbing, or other approved edging, shall be installed along both sides of the portion to be used as such for enhanced lateral stability.
8. A signed letter from the manufacturer shall be provided to the fire code official certifying that the installation meets all requirements of the manufacturer's specifications prior to issuance of the Certificate of Occupancy.
9. The surface shall be maintained in proper working order at all times when utilized as a required fire lane. Should the surface become damaged or fall into disrepair, the fire code official, or designee, shall be authorized to require the repair and recertification surface at the expense of the owner or entity in charge of maintaining of the surface.

Amend:

503.2.4 Turning Radius. The required turning radius of a fire apparatus access road shall be 25 feet for the inside radius and 50 feet for the outside radius, or as otherwise determined by the *fire code official* in accordance with Sections 104.9 or 104.10.

Amend:

503.3 Marking. Where required by the fire code official, approved striping, signs, or other approved markings, that include the words "FIRE LANE TOW AWAY ZONE" or "FIRE ZONE TOW AWAY ZONE" shall be provided for fire apparatus access roads, fire lanes, and/or fire zone(s), to identify such roads or prohibit the obstruction thereof. The means by which the fire lanes are designated shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility, in compliance with 503.1.4 thru 503.1.7.

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 "FIRE LANETOW AWAY ZONE" or "FIRE ZONE TOW AWAY ZONE" shall appear in four inch (4") white letters at 25 feet intervals or less, 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 or as approved by the Fire Code Official.
2. Signs. Signs shall read "FIRE LANE TOW AWAY ZONE" or "FIRE ZONE TOW AWAY ZONE" 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 35 feet (35') apart. Signs may be installed on permanent buildings or walls or as approved by the Fire Code Official.

ADD:

503.3.1 Certain subdivision street fire lanes. In subdivision access roadways where parking is not allowed on one or both sides, a designated fire lane is required and shall be marked and maintained in the compliance with 503.3.

Amend:

503.4 Obstruction of fire apparatus access roads. Fire apparatus access roads shall not be obstructed in any manner, including the parking, stopping, or standing of any nonemergency vehicle or other obstruction. 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. The owner, lessee, or person responsible for the maintenance or operation of a property shall ensure that all designated fire lanes remain unobstructed and accessible at all times.

No person may mark, post, or otherwise designate a non-approved fire lane or otherwise identify a passageway in such a manner that it tends to create confusion as to whether the passageway is an approved fire lane.

Amend:

503.6 Security gates. The installation of security gates across a fire apparatus access road shall be approved by the fire code official. Where security gates are installed, they shall have an approved means of emergency operation in accordance with Sections 506.1.1.1 thru 506.1.1.2. The security gates and the emergency operation shall be maintained operational at all times. Electric gate operators, where provided, shall be listed in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200.

ADD:

503.6.1 Direction of Swing. Security gates installed across a Fire Apparatus Access Road shall swing in the direction of travel towards the building or open horizontally to avoid backing up of Fire Apparatus and to allow for an expedited response.

ADD:

503.7 Authority to Designate and Enforce Fire Lanes. The fire code official is authorized to designate fire lanes on a parcel where such areas must be free of parked vehicles and other obstructions to provide ready access to buildings therein, in case of fire or other emergencies. The fire code official's designation of such fire lanes does not prohibit the owner of a property of their responsibility to maintain the area.

503.7.1 Removal of Vehicle by Property Owner. Except an authorized emergency vehicle, the owner of private property, or their agent, may have any motor vehicle that is parked in a legally approved fire lane, removed and stored at either their own expense or that of the vehicle's registered owner. The owner of the premises, or their agent, who has a vehicle removed and stored, is not liable for damages incurred as a result of removal or storage, if the vehicle is removed by an automobile wrecker service insured against liability for property damage incurred in towing vehicles and is stored by a storage company insured against liability for property damage incurred in the storage of vehicles.

503.7.2 Removal of Vehicle. Any unauthorized vehicle or similar obstruction, including, but not limited to, vehicles, containers, fencing, etc., within a lawfully designated fire lane, is declared a nuisance and may be removed, without notice, at the vehicle owners' expense upon the authorization of the fire code official under the following conditions:

1. When the vehicle violates the city code of ordinances by standing or parking a vehicle, whether occupied or unoccupied, except when occupied by a driver to momentarily pick up or discharge a passenger or passengers, in a fire lane or fire zone, or
2. When a vehicle or obstruction blocks the ingress or egress of an apartment complex, business, theater, night club, gymnasium, or other places of assembly or other required emergency access to a facility or
3. When an obstruction or vehicle's presence threatens the life safety of the public by impeding the ability of the fire apparatus and emergency medical equipment to respond to an emergency.

It shall be considered prima facie evidence that the registered owner unlawfully parked, placed, or permitted the vehicle or obstruction to be parked or placed within the fire lane when it obstructs, in whole or in part, any portion of the fire lane. The fire code official, police officer, or other city employee charged with enforcing the code of ordinances of the City of Leander shall cause such vehicle to be removed by the towing service operating under a contract with the City of Leander.

503.7.3 Abandonment of Fire Lane. No owner, manager, or person in charge of any premises served by a required fire lane shall abandon or close any such fire lane without the written permission of the fire code official.

ADD:

503.9 Special event fire lanes. No person shall park a vehicle in, or otherwise obstruct, any fire lane designated by the fire code official as a special event fire lane. All vehicles parked, or obstructions located, in a special events fire lane are declared a nuisance and in violation of Section 503.4 and subject to Section 503.7 through 503.7.2.

Amend:

505.1 Address identification. New and existing buildings shall be provided with approved address identification using numbers, building and or suite identification, or otherwise 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 and be easily readable from the required distances in this section. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Address characters shall be not less than 4 inches (102 mm) high with a minimum stroke width of 1/2 inch (12.7 mm).

Minimum address number size is based on distance from the centerline of the roadway to the structure bearing address using the following:

1. Less than 50 feet is 4 inches (102mm);
2. 51 to 100 feet is 6 inches (153 mm);
3. 101 to 150 feet is 8 inches (204 mm);
4. 151 to 200 feet is 10 inches (254 mm);
5. 201 to 250 feet is 12 inches (305 mm)
6. 251 or greater feet requires approval of the fire code official.

Where required by the fire code official, address identification shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole, or other sign or means shall be used to identify the structure. Address identification shall be maintained.

Single Family and townhome, or similar residential occupancies, shall have approved numerals with color contrasting with the background, clearly visible and legible from the street fronting the property and the rear alleyway where such access exists.

ADD:

505.1.2 Wayfinding Sign. A wayfinding sign shall be provided for all new and existing multi-building developments in which multiple facilities are marked off a single address point, such as in an apartment or multi-family complex, or when the nature and arrangement of the buildings require additional identification, where such signage would be conducive to navigation. Such signs shall be placed at all points of entry into the development, or as otherwise required by the fire code official. 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 36-inch by 36-inch.
4. Shall be provided with lighting or reflective sheeting.
5. Shall be permanently mounted.
6. Shall indicate major building and/or address numbers.
7. Shall indicate the developments name and address

ADD:

505.3 Multi-Building Complexes. Business, industrial and apartment complexes shall be identified by name and number on a display board at the main entry roadway.

505.3.1 Multi-Address Complexes. Business and industrial complexes with multiple addresses contained within shall post all addresses so that they are visible from primary fire department access roadway.

ADD:

505.4 Mall Lease Spaces. Each mall lease space shall be identified by a consistent number size at a consistent, readily visible location in proximity to exterior and mall entrance doors.

ADD:

505.5 Tenant identification. 505.5 Tenant identification.

Each occupied tenant space provided with a secondary egress door to the exterior or exit corridor shall be provided with tenant identification by business name and address. Letters and numbers shall be posted on the corridor side of the door, plainly legible and shall contrast with their background.

Exception: Tenant identification is not required for anchor stores.

Amend:

506.1 Where required. Where access to or within a structure or an area is restricted because of secured openings, physical barriers (such as gates, fences, bollards, and the like), in all commercial, industrial, or institutional structures in which fire protection systems, or elevators are installed 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 visible from the access road fronting property, located within 10 feet (3048 mm) from the primary Fire Department access into a building or facility as approved by the fire code official. It shall be installed at not less than 4 feet (1220 mm) and no more than 6 feet (1829 mm) above the finished grade. The key box shall be of an approved type listed in accordance with UL 1037 and shall contain keys to gain necessary access as required by the fire code official.

ADD:

506.1.1.2 Electronic gates. Emergency access of limited access gates at apartments and gated communities, or any other occupancy deemed as high risk by the Fire Code Official shall be equipped with both Knox® Key Switch and a number keypad system. The Key Switch shall be located on a keypad pedestal or as approved by the Fire Code Official.

506.1.1.3 Electrical Disconnect/Chain Access. In the event of a power failure, the gate shall open by means of an electrical power disconnect switch in a weatherproof box. The gate shall be capable of being physically disconnected from the operating mechanism from either side of the gate. Slider gate chains shall have access to cut and release the gate from the opener mechanism from either side. Swing gates shall have a pin in the swing arm mechanism secured by a Knox Padlock. The padlock shall be accessible from either side of the gate. Gates that are not in proper operating condition shall be chained and locked in an open position.

Amend:

507.1 Required water supply. An approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises on which facilities, buildings, or portions of buildings are hereafter constructed or moved into or within the jurisdiction. Where property is subdivided with or without the creation of public or private streets for the expressed purpose of providing said subdivided parcels for sale or otherwise permitting separate and/or individual development to occur, an approved water supply capable of supplying the projected fire flow for fire protection shall be provided and extended to serve directly all subdivided properties. The projected fire flow will be based on the greatest

potential demand posed by any type of occupancy allowed by zoning laws on the projected property.

Exception: Additions to existing and newly constructed one- and two-family homes located in areas having substandard water supplies, where the development of full fire-flow is impractical, shall comply with the provisions of Appendix B Section B103 with the approval of the fire code official.

Amend:

507.2.1 Private fire service mains. Private fire service mains and appurtenances shall be installed in accordance with NFPA 24. The installation of all private fire lines shall be by a sprinkler contractor registration underground (SGR-U) licensed company.

ADD:

507.2.1.1 Flushing. All private service mains, including lead-ins and remote Fire Department connections, shall be fully flushed per NFPA 24 guidelines before hydrostatically testing the line. Flushing shall be through an open pipe for the lead-ins and Fire Department connections. The open pipe shall be of the minimum size outlined in NFPA 24 and not reduced. Private fire service mains serving only hydrants shall be flushed through the 5.25" hydrant outlet.

Amend:

507.3 Fire flow. Fire-flow requirements for buildings or portions of buildings and facilities shall be determined by an approved method, and in accordance with Appendix B.

Amend:

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 or approved documentation of the test shall be provided to the fire code official prior to final approval of the water supply system. 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 copy of the waterflow test report. 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 the applicable referenced NFPA standard.

Amend:

507.5 Fire hydrant systems. Fire hydrant systems shall comply with Sections 507.5.1 through 507.5.7 and Appendix C.

Amend (DELETE Exception #2):

507.5.1 Where required. Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet (122 m) from a hydrant on a

fire apparatus access road, as measured by an approved route around the exterior of the facility or building, onsite fire hydrants and mains shall be provided as approved by the Fire Code Official.

Exception: Group U occupancies, not having an automatic sprinkler system installed, the distance requirement shall be 600 ft (183 m).

Amend

507.5.1.1 Hydrant for standpipe systems and fire department connections. Buildings equipped with a standpipe system installed in accordance with Section 905, or if a building is required to have an automatic sprinkler system installed in accordance with this code and as required in Section 912.8, shall have a fire hydrant within 100 feet (30 480 mm) of the fire department connections.

Amend:

507.5.2 Inspection, testing and maintenance. Fire hydrant systems shall be subject to periodic tests as required by the Fire Code Official. Fire hydrant systems shall be maintained in an operative condition at all times and shall be repaired where defective. In accordance with NFPA 25 and 291, if the hydrant is found inoperable, it shall be bagged with a black, weather-resistive cover that shall be marked with a stenciled warning: "OUT OF SERVICE" and the fire department shall be notified. Additions, repairs, alterations and servicing shall comply with approved standards. All installed hydrants, public and private, shall be silver in color and manufactured in accordance with the current approved City of Leander fire hydrant detail, unless otherwise approved by the Fire Code Official. Records and test of required maintenance shall be maintained.

Amend:

507.5.4 Obstruction. Unobstructed access to fire hydrants shall be maintained at all times. Posts, fences, vehicles, vegetative 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 accessible or discernible. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants.

ADD:

507.5.7 Reflective pavement markers. All fire hydrants shall be identified by the installation of approved blue reflective pavement markers.

ADD:

509.1.2 Electrical service shut-off access. When electrical service shut-off controls are located inside a building, a door must provide direct access from the exterior to the room containing these shut-off controls if required by the fire code official. The fire code official may require a remote shunt trip system for the safe disconnection of electrical services.

ADD:

509.2.1 Sprinkler riser rooms. Sprinkler risers must be located in rooms with a minimum fire-resistive rating of one hour and shall have direct access from the exterior of the building being served. The riser room should provide a clear space of at least 36 inches on at least two sides of the riser. If the room is not solely used as a sprinkler riser room, its size will be determined by the Fire Code Official. Sprinkler riser rooms may also house fire alarm control panels without requiring an increase in size as long as the fire alarm control panel (FACP) remains fully accessible and compliant with all adopted codes. An additional key box is required for access to the sprinkler riser room and should be installed in accordance with section 506.1.

ADD:

603.2.3 Main electrical shut off. Every newly constructed or remodeled building or facility, or as otherwise defined by the applicability of this code, must have at least one electrical disconnect located on the exterior of the building. This power termination device shall be placed in an easily accessible location and must be clearly labeled.

When the main shut-off is in an enclosed room, an exterior door shall be provided, and an additional approved key box will be required to provide access to the electric room as required by the Fire Code Official.

Exception: Two means of electrical disconnect may be allowed by the *Fire Code Official* when the disconnects are located within 3 feet of each other with no other features installed between them, and they are clearly marked to indicate that both disconnects must be utilized to terminate power to the building.

Amend:

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.

Amend:

Amend:

605.4.1.1 Approval. Outdoor fuel oil storage tanks shall be in accordance with UL 142 or UL 2085, and also listed as double wall/secondary containment tanks.

Amend:

605.4.2 Fuel oil storage inside buildings. Fuel oil storage inside buildings shall comply with Sections 605.4.2.2 through 605.4.2.8 and Chapter 57.

Amend:

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:

1. 660 gallons (2498 L) in unsprinklered buildings, where stored in a tank complying with UL 80, UL 142 or UL 2085, and listed as a double wall/secondary containment tank for Class II liquids.
2. 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 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.

ADD:

703.3 Tenant Separations. Walls separating two or more tenants in a multi-tenant buildings or facilities shall be constructed as a continuous membrane that extends from the top of the foundation to the underside of the floor or roof sheathing that is designed and constructed to restrict the movement of smoke. Walls shall be continuous and shall be sealed in accordance with the 2021 International Building Code, sections 714 and 715.

Amend:

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 entirely constructed of non-combustible material.

Exception: Corridors protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be limited to not more than 50 percent of the wall area.

Amend:

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 entirely constructed of non-combustible material.

Amend:

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 entirely constructed of non-combustible material.

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.

Amend:

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 entirely constructed of non-combustible material.

ADD:

901.4.4.1 Compliance with Code of Ordinances. Calculations of square feet in compliance with the City of Leander Code of Ordinances Chapter 3, Article 3.03, Division 2, Section 3.03.041 is determined by the total gross aggregate area under a common roof (excluding covered porches, balconies, or detached garages separated by 10 feet or more in one- and two-family dwellings). Unless otherwise approved by the Fire Code Official, dividing a building into separate fire areas so as not to exceed the limits established in the aforementioned will not be accepted in lieu of compliance with required installation of fire protection systems.

ADD:

901.4.4.2 Additions to Existing Buildings. When additions or renovations are performed to existing buildings or facilities, resulting in the total square footage of the structure to increase beyond the limits established in the City of Leander Code of Ordinances Chapter 3, Article 3.03, Division 2, Section 3.03.041 and as determined by Section 901.4.4.1, the existing building shall be retroactively protected.

Exception: Effective separation of fire areas can be demonstrated through noncombustible design in compliance with 901.4.4 and the International Building Code, as approval by Fire Code Official.

Amend:

901.5 Installation acceptance testing. Fire protection and life safety systems and appurtenances thereto shall be subject to acceptance tests as contained in the installation standards and as approved by the fire code official. The fire code official shall be notified before any required acceptance testing. A representative of the Fire Marshal shall witness all required acceptance tests for all these systems.

ADD:

901.6.1.1 Standpipe Testing. Building owners or managers must maintain and test standpipe systems as required by NFPA 25 and this code. The following additional requirements apply to the 5-year required testing:

1. The piping between the Fire Department Connection (FDC) and the standpipe shall be backflushed or inspected by approved camera when foreign material is present or when caps are missing, and 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 types of standpipe systems.
2. For any manual (dry or wet) 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 is no required pressure criteria at the outlet. Verify that check valves function properly and that there are no closed control valves on the system.
3. Any pressure relief, reducing, or control valves 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 of 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 Tags 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 of 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 requests 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.

ADD:

901.6.4 Maintenance Agreement. A maintenance agreement, as defined in Section 202, shall be established and maintained between the building owner and a licensed fire protection company for all life safety and fire protection systems. This agreement must encompass general maintenance, repair of fault conditions, and testing and inspection in accordance with applicable laws, codes, and standards. Proof of an active maintenance agreement must be provided to the fire code official during any system acceptance test, upon request, and during routine fire inspections. Agreements solely for testing and inspection do not satisfy this requirement. The building owner is responsible for ensuring

compliance with the maintenance agreement at all times while the building is occupied or operational.

ADD:

901.6.5 False Alarms and Nuisance Alarms. The manager, operator, or property owner shall maintain all fire alarm systems in an approved and operable condition at all times to prevent false and nuisance alarms. False and nuisance alarms shall not be given, signaled, or transmitted, nor caused or permitted to occur by failure to maintain the system or through neglect. The Fire Marshal is authorized to enforce this provision, including requiring repairs, upgrades, or other corrective actions to ensure compliance. Maintenance and repairs shall be documented upon request to demonstrate compliance with this section.

Amend:

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 the fire code official shall be notified immediately and, where required by the fire code official, the building shall either be evacuated or an *approved* fire watch shall be provided for all occupants left unprotected by the shut down until the fire protection system has been returned to service. Where utilized, fire watches, executed as required and *approved* by the *fire code official*, 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 management program. The notification and impairment program for water-based fire protection systems shall comply with NFPA 25.

Amend:

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 standard, or as *approved* by the *fire code official*.

ADD:

903.1.2 Residential systems. Unless specifically allowed by this Code or the International Building Code, residential sprinkler systems installed in accordance with NFPA 13D or NFPA 13R shall not be recognized for the purposes of exceptions or reductions, commonly referred to as "trade-offs," permitted by other requirements of this Code.

In addition, residential sprinkler systems installed in accordance with NFPA 13R must include attic sprinkler protection to be recognized for the purposes of such "tradeoffs" permitted by other requirements of this Code.

ADD:

903.1.3 Hydraulic calculations and safety factor. All automatic sprinkler systems shall be designed with a minimum safety factor for the hydraulically most demanding design area using Table 903.1.3 Hydraulic Calculation Design Criteria.

A safety factor shall be added to the minimum required water supply calculation for all automatic sprinkler systems, applied at the endpoint of the hydraulic calculations, excluding any required flow for hose streams.

Exception: A safety factor less than those defined in this section may be approved by the fire code official only if historical water supply data is available to demonstrate that the reasonably expected fluctuations will not cause the water supply to fall below the system demand.

Table 903.1.3

Hydraulic Calculation Design Criteria

System Type	Safety Factor
Residential 13D AND 13R	10% OR 5 PSI (lesser of the system demand)
Commercial NFPA 13 - LIGHT HAZARD	10% OR 5 PSI (lesser of the system demand)
Commercial NFPA 13 - ORDINARY HAZARD AND ABOVE	10 PSI OR 10% (whichever is greater)
Standpipe and hose systems NFPA 14	10 PSI OR 10% (whichever is greater)
Water spray fixed systems NFPA 15	10 PSI OR 10% (whichever is greater)
Foam water sprinkler and foam water spray systems NFPA 16	10 PSI OR 10% (whichever is greater)

ADD:

903.1.4 High volume low speed fans in new and existing buildings. The use of High-Volume Low Speed (HVLS) or High-Volume Low Velocity (HVLV) fans in fire sprinklered areas of new and existing buildings shall only be permitted as follows:

1. HVLS fans are permitted in rack storage and palletized storage arrangements up to 20 feet in height in buildings with 30 feet or less ceiling clearance, when Early Suppression Fast Response (ESFR) sprinklers are used to protect the storage array.
2. HVLS fans are permitted in light-hazard and ordinary-hazard occupancies as defined in NFPA 13, Standard for the Installation of Sprinkler System.
3. HVLS fans are not permitted in sprinklered areas with palletized storage greater than 12 feet in height protected by control mode sprinklers.
4. In all cases, HVLS fans are required to be designed and installed to shut down automatically on any fire alarm signal. This includes automatic shut down upon sprinkler system water flow alarm or any manual or automatic fire alarm detection device provided in the space.
5. In all cases, the clearance between the HVLS fans and the ceiling sprinklers and the top of storage shall be in compliance with the obstruction and clearance rules of NFPA 13.

Exception: When a technical opinion and report is provided in accordance with Section 104.8.2, the fire code official or their designee shall analyze the opinion report and may approve the use of HVLS or HVLV fans in additional areas when it is determined that the effectiveness of the fire sprinkler system is not compromised.

Amend:

903.2 Where required. Approved automatic 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. Storage shall not be allowed within the elevator machine room. Signage shall be provided at the entry doors to the elevator machine room indicating “ELEVATOR MACHINERY – NO STORAGE ALLOWED.”

Amend:

903.2.1.1 Group A-1. An automatic sprinkler system shall be provided throughout stories containing Group A-1 occupancies and throughout all stories from the Group A-1 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

1. The fire area exceeds 6,000 square feet (557.42 m2).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.
4. The fire area contains a multiple-theater complex.

Amend:

903.2.1.3 Group A-3. An automatic sprinkler system shall be provided throughout stories containing Group A-3 occupancies and throughout all stories from the Group A-3 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

1. The fire area exceeds 6,000 square feet (557.42 m2).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.

Amend:

903.2.1.4 Group A-4. An automatic sprinkler system shall be provided throughout stories containing Group A-4 occupancies and throughout all stories from the Group A-4 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

1. The fire area exceeds 6,000 square feet (557.42 m2).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.
4. Any Group A-3 occupancy serving alcohol shall comply with the fire sprinkler requirements for Group A-2 Occupancies in section 903.2.1.2.

ADD:

903.2.2.1. Animal housing or care facilities. An automatic sprinkler system in accordance with section 903.3 and 903.4 shall be provided in fire areas containing an animal housing

or care facility when the animals are not provided with constant supervision. The following exceptions apply to this requirement:

Exceptions:

1. An automatic sprinkler system is not required in animal housing or care facilities serving 50 or fewer animals where all the following conditions are met:
 - a. Walls and ceilings have a class a finish as specified in section 803, and
 - b. The facility is provided with a supervised fire alarm system in accordance with section 907.2.2.2.
2. An automatic sprinkler system is not required in animal housing or care facilities serving 100 or fewer animals where all the following conditions are met:
 - a. The facility is of 1-hour fire resistive construction on both sides of the boundary walls of the kennel area and
 - b. Walls and ceilings have a class a finish as specified in section 803, and
 - c. The facility is provided with a supervised fire alarm system in accordance with section 907.2.2.2.
3. An automatic sprinkler system is not required in animal housing or care facilities where every animal has immediate and unobstructed access to an exterior area of safety approved by the fire code official and the facility is provided with a supervised fire alarm system in accordance with section 907.2.2.2.

Amend:

903.2.3 Group E. An automatic sprinkler system shall be provided for Group E occupancies as follows:

1. Throughout all Group E fire areas greater than 6,000 square feet (557.42 m²) in area.
2. The Group E fire area is located on a floor other than a level of exit discharge serving such occupancies.
3. Exception: In buildings where every classroom has not fewer than one exterior exit door at ground level, an automatic sprinkler system is not required in any area below the lowest level of exit discharge serving that area.
4. The Group E fire area has an occupant load of 300 or more.

Amend:

903.2.4 Group F-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group F-1 occupancy where one of the following conditions exists:

1. A Group F-1 fire area exceeds 6,000 square feet (557.42 m²).
2. A Group F-1 fire area is located more than three stories above grade plane.
3. The combined area of all Group F-1 fire areas on all floors, including any mezzanines, exceeds 12,000 square feet (1115 m²).

Amend:

903.2.7 Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:

1. A Group M fire area exceeds 6,000 square feet (557.42 m²).
2. A Group M fire area is located more than three stories above grade plane.
3. The combined area of all Group M fire areas on all floors, including any mezzanines, exceeds 12,000 square feet (1115 m²).

ADD:

903.2.8.5 Bed and Breakfast. An automatic sprinkler system in accordance with section 903.3 shall be provided throughout all buildings with a Group R fire area and in compliance with adopted ordinance Article 3.03, Division 2, Section 3.03.041 (b) (1).

Exceptions: The following exceptions shall apply only to existing residential structures, as defined by the 2021 International Residential Code:

1. Bed and Breakfast residence:
 - a. Less than three guestrooms with a maximum occupancy of 4 guests; *and*
 - b. All guest rooms with direct access to the public way, using a secondary egress; *and*
 - c. Smoke alarms are installed throughout as required by this Code or the building code; *and*
 - d. Carbon monoxide alarms are installed where required by this Code or the building code; *and*
 - e. Monitored fire alarm system; *and*
 - f. Fire extinguishers are located throughout the building as required by this Code.
2. Bed and Breakfast Inn:
 - a. 3-5 guestrooms with an occupancy of more than four and less than ten guests; *and*
 - b. Installation of an NFPA 13-D automatic fire sprinkler system throughout the structure; *and*
 - c. All guest rooms with direct access to the public way, using a secondary egress; *and*
 - d. Smoke alarms are installed throughout as required by this Code or the building code; *and*
 - e. Carbon monoxide alarms are installed where required by this Code or the building code; *and*
 - f. Monitored fire alarm system; *and*
 - g. Self-closing guestroom doors.
3. Bed and Breakfast Lodge:
 - a. 6-8 guestrooms with a maximum occupancy of 16 guests; *and*
 - b. Installation of an NFPA 13-R automatic fire sprinkler system throughout the structure; *and*
 - c. All guest rooms with direct access to the public way, using a secondary egress; *and*
 - d. Smoke alarms are installed throughout as required by this Code or the building code; *and*

- e. Carbon monoxide alarms are installed where required by this Code or the building code; *and*
- f. Monitored fire alarm system; *and*
- g. Self-closing guestroom doors; *and*
- h. The installation of a Type I hood above all commercial and domestic cooking appliances used for commercial purposes is required by Section 606 of this Code and applicable standards.

Amend:

903.2.9 Group S-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group S-1 occupancy where one of the following conditions exists:

- 1. A Group S-1 fire area exceeds 6,000 square feet (557.42 m2).
- 2. A Group S-1 fire area is located more than three stories above grade plane.
- 3. The combined area of all Group S-1 fire areas on all floors, including any mezzanines, exceeds 12,000 square feet (1115 m2).
- 4. A Group S-1 fire area used for the storage of commercial motor vehicles where the fire area exceeds 5,000 square feet (464 m2).

Amend:

903.2.9.1 Repair garages. An automatic sprinkler system shall be provided throughout all buildings used as repair garages in accordance with Section 406.8 of the International Building Code, as shown:

- 1. Buildings having two or more stories above grade plane, including basements, with a fire area containing a repair garage exceeding 6,000 square feet (557.42 m2).
- 2. Buildings not more than one story above grade plane, with a fire area containing a repair garage exceeding 6,000 square feet (557.42 m2).
- 3. Buildings with repair garages servicing vehicles parked in basements.
- 4. A Group S-1 fire area used for the repair of commercial motor vehicles where the fire area exceeds 5,000 square feet (464 m2).

ADD:

903.2.9.5 Self-Service Storage Facility. An automatic sprinkler system shall be installed throughout all self-service storage facilities.

Amend:

903.2.10 Group S-2 parking garages. An automatic sprinkler system shall be provided throughout buildings classified as parking garages if required by the adopted ordinance Article 3.03, Division 2, Section 3.03.041 (b) (1), or where any of the following conditions exist:

- 1. Where the fire area of the enclosed parking garage, in accordance with Section 406.6 of the International Building Code, exceeds 12,000 square feet (1115 m2).
- 2. Where the enclosed parking garage, in accordance with Section 406.6 of the International Building Code, is located beneath other groups.

Exception: Enclosed parking garages located beneath Group R-3 occupancies.

3. Where fire area of the open parking garage, in accordance with Section 406.5 of the International Building Code, exceeds 48,000 square feet (4460 m²).

Amend (DELETE exception of Group F-2):

903.2.11.3 Buildings 55 feet or more in height. An automatic sprinkler system shall be installed throughout buildings that have one or more stories with an occupant load of 30 or more located 55 feet (16 764 mm) or more above the lowest level of fire department vehicle access, measured to the finished floor.

ADD:

903.3.1.2.2 Corridors and balconies. Sprinkler protection shall be provided in all corridors and for all balconies.

Amend:

903.3.1.3 NFPA 13D sprinkler systems. Automatic sprinkler systems installed in one- and two-family dwellings; Group R-3; Group R-4, Condition 1; townhouses, and bed and breakfast occupancies with a maximum occupancy of 10 guests, shall be permitted to be installed throughout in accordance with NFPA 13D or in accordance with state law.

ADD:

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.

ADD:

903.3.1.4.1 Attics. Only dry-pipe, preaction, 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:

1. 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.

ADD:

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.

Amend:

903.3.5 Water supplies. Water supplies for automatic sprinkler systems shall comply with this section and the standards referenced in Section 903.3.1. The potable water supply shall be protected against backflow in accordance with the requirements of this section and the International Plumbing Code. For connections to public waterworks systems, the water supply test used for design of fire protection systems shall be adjusted to account for seasonal and daily pressure fluctuations based on information from the water supply authority and as approved by the fire code official.

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.

ADD:

903.3.9 Backflow protection. Modifications to water-based fire protection systems without backflow protection will require the installation of a backflow preventer as required by the city's adopted ordinance. All fire protection systems with a FDC shall have a reduced pressure zone or reduced pressure detector assembly installed.

Amend:

903.4.2 Alarms. An approved audible device, located on the exterior of the building in an approved location, shall be connected to each automatic sprinkler system. Such sprinkler waterflow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system.

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.

ADD:

903.4.4 Jockey pump valves. Jockey pump control valves shall be of the indicating type, electronically supervised, and slow closure, as recognized by NFPA 13.

ADD:

903.4.5 Control valves. Backflow prevention devices that are 2 inches or smaller must have indicating and slow closure control valves installed.

ADD:

903.4.6 Supervisory switches. Plug-type supervisory switches are not permitted to supervise any control valve.

ADD:

905.2.1 Class 1 Manual Standpipe systems. Class I standpipe systems shall be hydraulically designed in accordance with Section 903.1.3, based on fire apparatus providing 1250 GPM at 150 psi at the Fire Department Connection.

ADD:

905.3.9 Travel Distance. In buildings exceeding 10,000 square feet (929 m²) in area per story and where any portion of the building's interior area is more than 200 feet (60960 mm) of travel, vertically and horizontally, from the nearest point of fire department vehicle access, Class I automatic wet or manual wet standpipes shall be provided.

Exceptions:

1. Automatic dry, semi-automatic dry and manual dry standpipes are allowed as provided for in NFPA 14 where approved by the fire code official.
2. R-2 occupancies with four stories or fewer that do not have interior corridors.

Amend:

905.4 Location of Class I standpipe hose connections. Class I standpipe hose connections shall be provided in all of the following locations:

1. In every required exit stairway, a hose connection shall be provided for each story above and below grade plane. Hose connections shall be located at an intermediate landing between stories, unless otherwise approved by the fire code official.
Exception: A single hose connection shall be permitted to be installed in the open corridor or open breezeway between open stairs that are not greater than 75 feet (22 860 mm) apart.
2. On each side of the wall adjacent to the exit opening of a horizontal exit.
Exception: Where floor areas adjacent to a horizontal exit are reachable from an interior exit stairway hose connection by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30 480 mm) of hose, a hose connection shall not be required at the horizontal exit.
3. In every exit passageway, at the entrance from the exit passageway to other areas of a building.
Exception: Where floor areas adjacent to an exit passageway are reachable from an exit stairway hose connection by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30 480 mm) of hose, a hose connection shall not be required at the entrance from the exit passageway to other areas of the building.
4. In covered mall buildings, adjacent to each exterior public entrance to the mall and adjacent to each entrance from an exit passageway or exit corridor to the mall. In open mall buildings, adjacent to each public entrance to the mall at the perimeter line and adjacent to each entrance from an exit passageway or exit corridor to the mall.
5. Where the roof has a slope less than 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 exit stairway with stair access to the roof provided in accordance with Section 1011.12.

6. Where the most remote portion of a nonsprinklered floor or story is more than 150 feet (45 720 mm) from a hose connection or the most remote portion of a sprinklered floor or story is more than 200 feet (60 960 mm) from a hose connection, the fire code official is authorized to require that additional hose connections be provided in approved locations.
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.

ADD:

905.8.1 Standpipe supervision. All dry standpipe systems shall be monitored with a minimum of 10 PSI and a maximum of 40 PSI air pressure, with a high/low alarm, and supervised according to the guidelines of NFPA 72.

Amend:

905.9 Valve supervision. Valves controlling water supplies shall be supervised in the open position so that a change in the normal position of the valve will generate a supervisory signal at the supervising station required by Section 903.4. Where a fire alarm system is provided, a signal shall be transmitted to the control unit.

Exceptions:

1. Valves to underground key or hub valves in roadway boxes do not require supervision.
2. Valves locked in the normal position and inspected as provided in this code in buildings not equipped with a fire alarm system.

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.

ADD:

907.1.4 Design Standards. Where a new, remodeled, or replacement fire alarm system is installed:

1. All Fire Alarm systems serving twenty (20) or more alarm-initiating devices shall be an intelligent addressable fire detection system.
2. Fire Alarm systems utilizing more than twenty (20) smoke detectors shall incorporate analog initiating devices.

Amend:

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 purposes 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.

Exception: Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.

Activation of fire alarm notification appliances shall:

1. Cause illumination of the means of egress with light of not less than 1 foot-candle (11 lux) at the walking surface level, and
2. Stop any conflicting or confusing sounds and visual distractions.

ADD:

907.2.2.2 Animal housing or care facilities. Fire areas containing an animal housing or care facility shall be provided with an electronically supervised automatic smoke detection system. In spaces provided with a source of heat or light but otherwise unconditioned, in lieu of smoke detection the alarm system may be activated by quick response heat detectors with a response time index of less than 100 (E.G. RTI CLASSIFICATION OF "QUICK", "ULTRA FAST", "V-FAST").

Exceptions: Smoke detectors and/or quick response heat detectors are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with sections 903.3 and 903.4 and activation of the automatic sprinkler system activates notification appliances as required by Section 907.2.2.2.1.

ADD:

907.2.2.2.1 Notification appliances. Notification appliances shall provide audible and visual alarm signals in office areas and other areas within the fire area where no animals are housed or cared for. Notification appliances

Amend:

907.2.3 Group E. A manual fire alarm system that initiates the occupant notification signal utilizing an emergency voice/alarm communication system meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall be installed in Group E 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 50 feet 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 shall not be required in Group E occupancies with an occupant load of 50 or less.

- 1.1 Residential In-Home day care occupancies with not more than 12 children may use interconnected single station detectors in all habitable rooms and as otherwise required in accordance with the adopted edition of the International Residential Code and NFPA . (For care of more than five children 2 1/2 or less years of age, see Section 907.2.6.)
2. Emergency voice/alarm communication systems meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall not be required in Group E occupancies with occupant loads of 100 or less, provided that activation of the manual fire alarm system initiates an approved occupant notification signal in accordance with Section 907.5.
3. Manual fire alarm boxes shall not be required in Group E occupancies where all of the following apply:
 - 3.1 Interior corridors are protected by smoke detectors.
 - 3.2 Auditoriums, cafeterias, gymnasiums and similar areas are protected by heat detectors or other approved detection devices.
 - 3.3 Shops and laboratories involving dusts or vapors are protected by heat detectors or other approved detection devices.
 - 3.4 Manual activation is provided from a normally occupied location.
4. Manual fire alarm boxes shall not be required in Group E occupancies where all of the following apply:
 - 4.1 The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.
 - 4.2 The emergency voice/alarm communication system will activate on sprinkler water flow.
 - 4.3 Manual activation is provided from a normally occupied location.

Amend:

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

Exception: Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1, and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.

Amend:

907.2.13.1.2 Duct Smoke Detection. Duct smoke detectors complying with Section 907.3.1 shall be located as follows:

1. In the main return air plenum of each air-conditioning system having a capacity equal to or greater than 2000 cubic feet per minute (cfm). Such detectors shall be located in a serviceable area downstream of the last duct inlet and filter.
2. At each connection to a vertical duct or riser serving two or more stories from a return air duct or plenum of an air-conditioning system. In Group R-1 and R-2 occupancies, a smoke detector is allowed to be used in each return air riser

carrying not more than 5,000 cfm (2.4 m³/s) and serving not more than 10 air-inlet openings.

ADD:

907.2.24 High Occupant Load. In addition to the requirements listed in other sections of this Code, any occupancy having an occupant load of 1,000 or more shall be provided with a manual fire alarm system.

Exception: Open Parking Garages

Amend:

907.3.1 Duct Smoke Detectors. Smoke detectors installed in ducts shall be listed for the air velocity, temperature and humidity present in the duct. Duct smoke detectors shall be connected to the building's fire alarm control unit where a fire alarm system is required by Section 907.2 or when a dedicated function alarm panel exists. Activation of a duct smoke detector shall initiate a visible and audible supervisory signal at a *constantly attended location* and shall perform the intended fire safety function in accordance with this code and the International Mechanical Code. In facilities that are required to be monitored by a supervising station, duct smoke detectors shall report only as a supervisory signal and not as a fire alarm. They shall not be used as a substitute for required open area detection.

Exceptions:

1. The supervisory signal at a *constantly attended location* is required where duct smoke detectors activate the building's alarm notification appliances.
2. In occupancies not required to be equipped with a fire alarm system or a dedicated function alarm system, actuation of a smoke detector shall activate a visible or audible signal in an approved location and shall be identified as air duct detector trouble.

ADD:

907.4.2.7 Type. Manual alarm initiating devices shall be an approved double action type.

ADD:

907.6.1.1 Wiring Installation. All fire alarm systems shall be installed so 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 so 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 a four-foot horizontal and one-foot vertical separation between supply and return circuit conductors. The initiating device circuit (IDC) from a signaling line circuit interface device may be wired Class B, provided the distance from the interface device to the initiating device is ten feet or less.

Amend (DELETE all exceptions):

907.6.3 Initiating device identification. The fire alarm system shall identify the specific initiating device address, location, device type, floor level where applicable and status including indication of normal, alarm, trouble and supervisory status, as appropriate.

Amend:

907.6.6 Monitoring. Fire alarm systems required by this chapter or by the International Building Code shall be monitored by an approved supervising station in accordance with NFPA 72. See 907.6.3 for the required information transmitted to the supervising station.

1. Single- and multiple-station smoke alarms required by Section 907.2.11.
2. Smoke detectors in Group I-3 occupancies.
3. Automatic sprinkler systems in one- and two-family dwellings.

Amend:

910.2 Where required. Smoke and heat vents or a mechanical smoke removal system shall be installed as required by Sections 910.2.1 and 910.2.2.

Exceptions:

1. Frozen food warehouses used solely for storage of Class I and II commodities where protected by an approved automatic sprinkler system.
2. Only manual smoke and heat removal shall not be required in areas of buildings equipped with early suppression fast-response (ESFR) sprinklers. Automatic smoke and heat removal is prohibited.
3. Only manual smoke and heat removal shall not be required in areas of buildings equipped with control mode special application sprinklers with a response time index of 50 (m*S) 1/2 or less that are listed to control a fire in stored commodities with 12 or fewer sprinklers. Automatic smoke and heat removal is prohibited.

ADD:

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 (1394 m²) in single floor area.

Exception: Buildings of noncombustible construction containing only noncombustible materials.

2. 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 high-hazard commodity classification.

Exception: Buildings of noncombustible construction containing only noncombustible materials.

Amend (remove term "manual"):

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.

ADD:

912.1.2 Fire Department Connection Specifications. Sprinkler system and standpipe fire department hose connections shall be as follows:

1. Fire Department Connections shall be a 5 inch (127 mm) "Storz" connection.
2. The 5-inch (127 mm) "Storz" inlet shall be installed on a 30-degree elbow, angle pointing down.
3. Located no more than 30 feet (12,192 mm) from a public street, approved fire lane, or access Roadway.
4. Within 100 feet of an approved fire hydrant measured as the hose would be laid along a fire department apparatus roadway.
5. Minimum 30-inches (762 mm) at lowest point above finished grade and a maximum of 4-feet above finished grade measured from the bottom of the 5-inch (127 mm) "Storz" inlet
6. The Fire Code Official shall approve the location of freestanding fire department connections (remote connections). Freestanding FDC's must be physically protected against impact per the requirements of Section 312 and the clearance space required by Section 912.4.2.
7. Fire department connections for Group H occupancies will be freestanding (remote connections) and located as determined by the Fire Code Official.

Amend:

912.2.2 Existing Buildings. On existing buildings, wherever the fire department connection is not visible to approaching fire apparatus, the fire department connection shall be indicated by an approved sign mounted on the street front or on the side of the building. Such sign shall be a red 12-inch (305 mm) by 12-inch (305 mm), all weather sign with 2-inch (51 mm) white lettering, stating "FDC." The sign shall be mounted no less than 4-feet above the FDC connection, providing an unobstructed view from the fire department access roadway, to include consideration to future vegetative growth. If needed, an arrow can be used to indicate the location of the FDC. Such sign shall be subject to the approval of the Fire Code Official.

ADD:

912.2.3 Hydrant Distance. An approved fire hydrant must be within 100 feet of the fire department connection. The measurement method must follow an unobstructed path from the fire department access, meandering as a hose would lay.

ADD:

912.5.1 Fire Department Connection Signage. All FDC signage shall be made of all-weather material, red 12-inch (305 mm) by 12-inch (305 mm), with 2 inch (51 mm) white

lettering, stating "FDC." The sign shall be mounted no less than 4 feet above the FDC connection, providing an unobstructed view from the fire department access roadway, to include consideration to future vegetative growth. Existing buildings shall comply with Section 912.2.2.

Amend:

913.2.1 Protection of fire pump rooms. Rooms where fire pumps are located shall be separated from all other areas of the building in accordance with Section 913.2.1 of the International Building Code.

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 6 feet 8 inches 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 or 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.

Amend (DELETE #4):

913.4 Valve supervision. Where provided, the fire pump suction, discharge and bypass valves, and isolation valves on the backflow prevention device or assembly shall be supervised open by one of the following methods:

1. Central-station, proprietary or remote-station signaling service.
2. Local signaling service that will cause the sounding of an audible signal at a *constantly attended* location
3. Locking valves open.

Amend:

915.1.1 Where Required. Carbon monoxide detection shall be provided in Group I-1, I-2, I-4, and R occupancies, in Group B fire areas containing an animal housing or care facility, and in classrooms in Group E occupancies in the locations specified in Section 915.2 where any of the conditions in Section 915.1.2 through 915.1.6 exist.

Exceptions:

1. Carbon monoxide detection shall not be required in dwelling units, sleeping units, rooms of animal housing or care facilities where animals are housed or cared for, and classrooms where there are no communicating openings between the fuel-burning appliance or fuel burning fireplace and the dwelling unit, sleeping unit, room of animal housing or care facility where animals are housed or cared for, or classroom.
2. Carbon monoxide detection shall not be required in dwelling units, sleeping units, animal housing or care facilities where animals are housed or cared for, and classrooms where carbon monoxide detection is provided in one of the following locations:

- a. In an approved location between the fuel-burning appliance or fuel-burning fireplace and the dwelling unit, sleeping unit, animal housing or care facilities where animals are housed or cared for, or a classroom.
- b. On the ceiling of the room containing the fuel-burning appliance or fuel-burning fireplace.

Amend:

915.1.2 Fuel-burning appliances and fuel-burning fireplaces. Carbon monoxide detection shall be provided in dwelling units, sleeping units, rooms of animal housing or care facilities where animals are housed or cared for, and classrooms that contain a fuel-burning appliance or a fuel-burning fireplace.

Amend:

915.1.3 Forced-air furnaces. Carbon monoxide detection shall be provided in dwelling units, sleeping units, rooms of animal housing or care facilities where animals are housed or cared for, and classrooms served by a fuel-burning, forced-air furnace.

Exception: Carbon monoxide detection shall not be required in dwelling units, sleeping units, rooms of animal housing or care facilities where animals are housed or cared for, and classrooms where carbon monoxide detection is provided in the first room or area served by each main duct leaving the furnace, and the carbon monoxide alarm signals are automatically transmitted to an approved location.

Amend:

915.1.4. Fuel-burning appliances outside of dwelling units, sleeping units, rooms of animal housing or care facilities where animals are housed or cared for, and classrooms. Carbon monoxide detection shall be provided in dwelling units, sleeping units, rooms of animal housing or care facilities where animals are housed or cared for, and classrooms located in buildings that contain fuel-burning appliances or fuel-burning fireplaces.

Exceptions:

1. Carbon monoxide detection shall not be required in dwelling units, sleeping units, rooms of animal housing or care facilities where animals are housed or cared for, and classrooms where there are no communicating openings between the fuel-burning appliance or fuel-burning fireplace and the dwelling unit, sleeping unit, rooms of the animal housing or care facility where animals are housed or cared for, or classroom.
2. Carbon monoxide detection shall not be required in dwelling units, sleeping units, rooms of animal housing or care facilities where animals are housed or cared for, and classrooms where carbon monoxide detection is provided in one of the following locations:
 - 2.1 In an approved location between the fuel-burning appliance or fuel-burning fireplace and the dwelling unit, sleeping unit, rooms of the animal housing or care facility where animals are housed or cared for, or a classroom.
 - 2.2 On the ceiling of the room containing the fuel-burning appliance or fuel-burning fireplace.

Amend:

915.1.5 Private garages. Carbon monoxide detection shall be provided in dwelling units, sleeping units, rooms of animal housing or care facilities where animals are housed or cared for, and classrooms in buildings with attached private garages.

Exceptions:

1. Carbon monoxide detection shall not be required where there are no communicating openings between the private garage and the dwelling unit, sleeping unit, rooms of the animal housing or care facility where animals are housed or cared for, or classroom.
2. Carbon monoxide detection shall not be required in dwelling units, sleeping units, rooms of animal housing or care facilities where animals are housed or cared for, and classrooms located more than one story above or below a private garage.
3. Carbon monoxide detection shall not be required where the private garage connects to the building through an open-ended corridor.
4. Where carbon monoxide detection is provided in an approved location between openings to a private garage and dwelling units, sleeping units, rooms of animal housing or care facilities where animals are housed or cared for, or classrooms, carbon monoxide detection shall not be required in the dwelling units, sleeping units, rooms of animal housing or care facilities where animals are housed or cared for, or classrooms.

Amend:

915.3 Carbon Monoxide Detection. Carbon monoxide detection required by Sections 915.1 through 915.2.3 shall be provided by carbon monoxide alarms complying with Section 915.4 or carbon monoxide detection systems complying with Section 915.5. Electronically supervised carbon monoxide detection systems complying with Section 915.5, shall be provided in Group B fire areas containing an animal housing or care facility where animals are not provided with constant supervision.

Amend:

[BE] 1008.3.3 Rooms and spaces. In the event of power supply failure, an emergency electrical system shall automatically illuminate all of the following areas:

1. Electrical equipment rooms.
2. *Fire command centers.*
3. Fire pump rooms.
4. Sprinkler riser rooms
5. Generator rooms.
6. Public restrooms with an area greater than 300 square feet (27.87 m²).

Amend:

[BE] 1009.8 Two-way communication. A two-way communication system complying with Sections 1009.8.1 and 1009.8.2 shall be provided at the landing serving each elevator or bank of elevators on each accessible floor that is one or more stories above or below the *level of exit discharge*.

Exceptions:

1. Two-way communication systems are not required at the landing serving each elevator or bank of elevators where the two-way communication system is provided within *areas of refuge* in accordance with Section 1009.6.5.
2. Two-way communication systems are not required on floors provided with *ramps* conforming to the provisions of Section 1012.
3. Two-way communication systems are not required at the landings serving only service elevators that are not designated as part of the *accessible means of egress* or serve as part of the required *accessible route* into a facility.
4. Two-way communication systems are not required at the landings serving only freight elevators.
5. Two-way communication systems are not required at the landing serving a private residence elevator.
6. Two-way communication systems are not required in Group I-2 or I-3 facilities.
7. Buildings regulated under State Law and built in accordance with State registered plans, including variances or waivers granted by the State, shall be deemed to be in compliance with the requirements of Section 1009 and Chapter 11.

ADD:

1103.1.2 Group B Animal Housing or Care Facilities. Group B occupancies used for the purpose of animal housing or care facilities shall have interior wall and ceiling finishes that comply with table 803.3 in Chapter 8.

Amend:

1032.2 Reliability. Required *exit accesses*, *exits* and *exit discharges* shall be continuously maintained free from obstructions or impediments to full instant use in the case of fire or other emergency. An *exit* or *exit passageway* shall not be used for any purpose that interferes with a means of egress.

Amend:

1103.3 Existing elevators. In other than Group R-3, existing elevators, escalators and moving walks shall comply with the requirements of Sections 1103.3.1 and 1103.3.2. Provide emergency signage as required by Section 604.4.

ADD:

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.

Amend:

1103.7 Fire alarm systems. An *approved* fire alarm system shall be installed in existing buildings and structures in accordance with Sections 1103.7.1 through 1103.8.1 and provide occupant notification in accordance with Section 907.5 unless other requirements are provided by other sections of this code.

Exception: Occupancies with an existing, previously *approved* fire alarm system.

ADD:

1103.7.7 Animal housing or care facilities. An electronically supervised automatic smoke detection system complying with section 907.2.2.2 shall be installed in all fire areas containing an existing Group B Animal housing or care facility without constant supervision.

ADD:

1103.7.8 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.

Exception: Existing systems need not comply unless the total building, or fire alarm system, remodel or expansion exceeds 30% of the building. When cumulative building, or fire alarm system, remodel or expansion initiated after the date of original fire alarm panel installation exceeds 50% of the building, or fire alarm system, the fire alarm system must comply within 18 months of permit application.

ADD:

1103.7.8.1 Communication requirements. Refer to Section 907.6.6 for applicable requirements.

Amend:

1103.9 Carbon Monoxide Detection. Carbon Monoxide detection shall be installed in existing Group I-1, I-2, I-4 and R occupancies, in Group B fire areas containing animal housing or care facilities or in classrooms in Group E occupancies where those units include any of the conditions identified in Sections 915.1.2 through 915.1.6. The carbon monoxide alarms shall be installed in the locations specified in Section 915.2 and the installation shall be in accordance with Sections 915.3 and 915.4.

Exception: A carbon monoxide detection system in accordance with Section 915.5 shall be an acceptable alternative to carbon monoxide alarms.

DELETE:

2401.2 Nonapplicability. {DELETE in its entirety}

Amend:

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.

Amend:

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.

Amend:

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.

ADD:

5704.2.11.4.3 Observation Wells. Approved sampling tubes of a minimum 4-inches (101.5 mm) 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 (305 mm) 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 tube at the corners of the excavation with a minimum of 4 tubes. Sampling tubes shall be placed in the product line excavation within 10 feet (3 048 mm) of the tank excavation and one every 50 feet (15 240 mm) routed along product lines towards the dispensers, a minimum of two are required.

Amend:

5707.4 Mobile fueling areas. During fueling, the mobile fueling vehicle and point of connection to the vehicle shall not be located on public streets, *public ways* or inside *buildings*. Fueling on the roof level of parking structures or other *buildings* is prohibited. 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.

ADD:

6103.2.1.8 Jewelry Repair, Dental Labs and Similar Occupancies. Where natural gas service is not available, portable LP-Gas containers are allowed to be used to supply approved torch assemblies or similar appliances. Such containers shall not exceed 20-pound (9.0 kg) water capacity. Aggregate capacity shall not exceed 60-pound (27.2 kg)

water capacity. Each device shall be separated from other containers by a distance of not less than 20 feet.

Amend:

6107.4 Protecting Containers from Vehicles. Where exposed to vehicular damage due to proximity to alleys, driveways or parking areas, LP-gas containers, regulators and piping shall be protected in accordance with Section 312.

Amend:

6109.13 Protection of Containers. LP-gas containers shall be stored within a suitable enclosure or otherwise protected against tampering. Vehicle impact protection shall be provided as required by Section 6107.4.

Amend:

D103.3 Turning Radius. The minimum turning radius shall not be less than 25 feet (7 620 mm) inside or 50 feet (15 240 mm) outside.

Exception: Radius less than 25 feet (7 620 mm) inside or 50 feet (15 240 mm) outside as *approved* by the *fire code official*.

ADD:

D103.7 Driveways. Driveways providing access to dwelling units exceeding 150 feet (45 720 mm) in length shall provide a minimum unobstructed width of 14 feet (4267mm) and a minimum unobstructed height of 12 feet (3 657 mm). Driveways exceeding 150 feet (45 720 mm) in length shall be provided with turnarounds as approved by the fire code official. Driveways exceeding 200 feet (60 960 mm) in length and less than 20 feet (6096 mm) in width shall be provided with turnouts in addition to turnarounds. A single driveway shall not serve greater than five dwelling units. Driveway turnouts must be placed according to the requirements set by the fire code official.

Amend:

D104.2 Buildings, Facilities, and Shopping Centers exceeding 62,000 square feet in gross building fire area. Buildings, or facilities, and shopping centers having a gross building fire area of more than 62,000 square feet (5760m) shall be provided with two separate and *approved* fire apparatus access roads.

Amend:

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.

Amend:

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 otherwise approved by the fire code official. The fire code official retains

the authority to assess site-related factors such as the overall site configuration, topography, waterways, nonnegotiable grades, and other similar challenges, considering that the hardship from which relief is sought is not solely economic.

Exception: Where it is geographically impossible to be one-half of the maximum overall diagonal dimension apart, the secondary access road will be evaluated based on meeting the following conditions:

1. The two separate fire apparatus access roads must be separated as far as lawfully and reasonably permitted.
2. The two separate access points must be a minimum of 150 feet (45 720 mm) apart, measured in a straight line between accesses.
3. The two separate access points are allowed to share a common path of travel within the site only when blockage in any one area of this path does not block access from both the primary and secondary access simultaneously. Each of the two separate fire apparatus roads shall meet the requirements of the 2021 IFC, section 503, Fire Apparatus Access Roads.

Amend:

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 otherwise approved by the fire code official. The fire code official retains the authority to assess site-related factors such as the overall site configuration, topography, waterways, nonnegotiable grades, and other similar challenges, considering that the hardship from which relief is sought is not solely economic.

Section 3. That the geographical limits referred to in certain sections of the 2021 International Fire Code are hereby established as follows:

5704.2.9.6.1 Locations where above-ground tanks are prohibited. Storage of Class I and II liquids in above-ground tanks outside of buildings is prohibited within the boundaries of the City of Leander, where the storage is prohibited or restricted throughout this Code and associated laws, ordinances, and local amendments.

5706.2.4.4 Locations where above-ground tanks are prohibited. The storage of Class I and II liquids in above-ground tanks is prohibited within the boundaries of the City of Leander, where the storage is prohibited or restricted throughout this Code and associated laws, ordinances, and local amendments.

5806.2 Limitations. Storage of flammable *cryogenic fluids* in stationary containers outside of buildings is prohibited within the boundaries of the City of Leander, where the storage is prohibited or restricted throughout this Code and associated laws, ordinances, and local amendments.

6104.2 Maximum capacity within established limits. Within the limits established by law restricting the storage of liquefied petroleum gas for the protection of heavily populated or congested areas, the aggregate capacity of any one installation shall not exceed a water capacity of 2,000 gallons (7570 L) within the boundaries of the City of Leander in which the storage is prohibited or restricted throughout this Code and associated laws, ordinances and local amendments.

Section 4. Amendment of Conflicting Ordinances. All City ordinances or parts thereof conflicting or inconsistent with the provisions of this ordinance as adopted herein are hereby amended to the extent of such conflict, including but not limited to Ordinance No. 15-042-00. This Ordinance shall amend Article 5.03, City of Leander Code of Ordinances (the “Code”), in its entirety, and the contents of this Ordinance shall appear in Article 5.03 of the Code. In the event of a conflict or inconsistency between this ordinance and any other code or ordinance of the City, the terms and provisions of this ordinance shall govern.

Section 5. That if any section, subsection, sentence, clause, or phrase of this ordinance is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this ordinance. The City Council hereby declares that it would have passed this ordinance, and each section, subsection, clause, or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses, and phrases be declared unconstitutional.

Section 6. Savings Clause. That nothing in this ordinance or the Fire Code hereby adopted shall be construed to affect any suit or proceeding impending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or ordinance hereby amended as cited in Section 4 of this ordinance; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this ordinance.

Section 7. Effective Date. This ordinance after its passage and publication in accordance with the provisions of the Tex. Loc. Gov't. Code shall take effect on July 1, 2025.

Section 9. Open Meetings. It is hereby officially found and determined that the meeting at which this ordinance is passed was open to the public as required and that public notice of the time, place, and purpose of said meeting was given as required by the Open Meetings Act.

PASSED AND APPROVED on the 1st day of **May 2025**.

Attest:

CITY OF LEANDER, TEXAS

Dara Crabtree, City Secretary

Christine DeLisle, Mayor