

AN ORDINANCE OF THE CITY OF LIVE OAK, TEXAS REPEALING 2015 EDITIONS OF INTERNATIONAL FIRE CODE; AMENDING THE CITY'S CODE OF ORDINANCES; ADOPTING 2018 INTERNATIONAL FIRE CODE, ESTABLISHING CERTAIN BUILDING REGULATIONS AND REQUIREMENTS; AND ESTABLISHING PENALTIES THERETO

WHEREAS, the Texas Local Governmental Code empowers the City to enact fire codes and regulations and provide for their administration, enforcement, and amendment; and

WHEREAS, the regulation of fire related issues in all residences, all commercial and other buildings and building construction by the City of Live Oak is necessary to protect the public health and welfare; and

WHEREAS, the City adopted the 2015 version of the International Fire Code, which has been updated and amended with a new version; and

WHEREAS, the City finds it is in the interests and welfare of its citizens to repeal the 2015 International Fire Code and adopt the updated 2018 International Fire Code with amendments.

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

The City of Live Oak Code of Ordinances is hereby amended as follows:

**I.
AMENDMENTS**

2018 INTERNATIONAL FIRE CODE ADOPTED WITH AMENDMENTS

The Text of Chapter Eight (8), Article I, Sections 8-1 are hereby repealed and amended to read as follows:

Sec. 8-1. – International Fire Code adopted

The International Fire Code, 2018 Edition, is hereby adopted by reference as the Fire Prevention Code of the city, which shall control in regard to all subjects covered by such code, except as otherwise provided in this article or other ordinances of the city.

Sec. 8-2. Amendments

The Code adopted by this Article is hereby amended as set out in this section:

Section 101.6, "Requirements of other agencies", shall be added, and read:

101.6 Requirements of other Agencies.

The City of Live Oak Building Codes do not include all additional requirements for buildings and structures that may be imposed by other state/county agencies, occupational licensing boards or commissions. It shall be the responsibility of a permit holder, design professional, contractor or occupational license holder to determine whether any additional requirements exist.

Section 102.3 Change of use or occupancy, is amended, and shall read:

102.3 Change of use or occupancy

A change of occupancy shall not be permitted unless the use or occupancy is made to comply with the requirements of this code and the *International Building Code*. A change of the business name, responsible party, designated use, or any activity that deviates from the original submitted application within the occupancy shall qualify as a change of occupancy.

Sections 104.3.2 Photographic Documentation, shall be added, and read;

104.3.2 Photographic Documentation.

Members of the Fire Department making such examinations or inspections shall have the right, with proper credentials, and be authorized to take a reasonable number of photographs or videotapes for evidence and for records for use by the Fire Department to study hazards and scientific control for fire safety.

Section 105.4.1, Submittals, shall read:

105.4.1 Submittals

Construction documents and supporting data shall be submitted in two or more sets, and at least once by portable document format accepted on electronic memory card with each application for a permit and in such form and detail as required by the fire code official. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.

Exception: The fire code *official* is authorized to waive the submission of construction documents and supporting data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that review of *construction documents* is not necessary to obtain compliance with this code.

Section 105.6.1, Aerosol Products, shall read:

105.6.1, Aerosol Products

An operational permit is required to manufacture, store or handle an aggregate quantity of Level 2 or Level 3 aerosol products in excess of 250 pounds net weight. Aerosol storage noted in the above weight shall comply with the requirements of Chapter 51 of the International Fire Code, 2018 edition, and NFPA 30B, 2015 edition. The classification of aerosol, Level 1, 2 or 3, will be printed on the product manufacturer's packaging.

There shall not be allowed any storage or handling an aggregate quantity of any combination or single type of Level 1 or Level 2 aerosol products more than a combined net weight to exceed 1,000 pounds at any time, unless the products are stored in approved flammable liquid storage rooms (NFPA 30B, 2015 edition).

When stored or handled within the allowable quantities, segregation rules apply as referenced in Chapter 51 of the International Fire Code, 2018 edition. Where chain link fence enclosures are required, the fencing must comply with the following;

1. The fence shall not be less than No. 9 gauge steel wire, woven into a maximum 2 - inch diamond mesh.
2. The fence shall be installed from the floor to the underside of the roof or ceiling above.
3. Class III, IV and high-hazard commodities shall be stored outside of the aerosol storage area and a minimum of 8 feet (2438 mm) from the fence.
4. Access openings in the fence shall be provided with either self-closing or automatic-closing devices or a labyrinth opening arrangement preventing aerosol containers from rocketing through the access openings.
5. Not less than two means of egress shall be provided from the fenced enclosure.

Aisle requirements for segregated storage in general purpose warehouses shall comply with Table 5104.3.2.2

Section 105.6.33 Open flames and torches, shall read.

A building permit is required to remove paint with a torch; or to use a torch or open flame device in a wildfire risk area.

Section 105.6.37 Places of assembly. – Deleted

Section 105.7.7, Fire alarm and detection system and related equipment, add at end of paragraph:

Replacing a fire alarm panel is not considered maintenance to an existing system and shall require construction permit.

Section 106.3 Work commencing before permit issuance, shall read:

106.3 Work commencing before permit issuance

Any person who commences any work, activity or operation regulated by this code before obtaining the necessary permits shall be subject to a double permit fee. All work shall cease until the required permits are obtained and inspections completed. It shall be unlawful, and a violation of this code, subject to penalties as described herein, for any person to continue any work after having been served with a stop work order, except such work as that person is directed to perform by the Fire Chief, in order to remove a violation or unsafe condition.

Section 108.3.1, Records of Hazardous Materials, is added, and shall read:

108.3.1, Records of Hazardous Materials

Owners or the Owner's Representative of buildings or properties that store or use hazardous materials shall maintain chemical documents (SDS), and building/site data, construction, maintenance and modifications over the entire life of the building. A means shall be developed for off-site storage and maintenance of the documents. In addition, a secondary source of this information shall be made available in suitably designed hard copy or electronic format for use by emergency responders within a reasonable timeframe. The primary source of information shall be easily accessible by responders during emergencies.

Section 109, Board of Appeals, shall be retitled to read:

Section 109, Appeals

Section 109.1, Board of appeals established, is replaced with:

109.1 General. 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 and is hereby created an appeals process. Appeals shall be made first to the Fire Chief, then City Manager, and finally the City Council.

Section 109.2, shall read:

109.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The process shall have no authority to waive requirements of this code.

Section 109.3, shall read:

109.3 Qualifications. The process of appeals shall consist of the Fire Chief who is qualified by experience and training to pass on matters pertaining to fire code, City Manager, and City Council.

Section 109.4 is added and shall read:

109.4 Administration. The fire code official shall take immediate action in accordance with the decision of the appeals process.

Delete Appendix A

Section 110

110.4. Should read: Violations; penalty.

Any person who shall violate a provision of the Code adopted by this article, or fail to comply therewith, or with any of the requirements thereof, or who shall erect, construct, alter, demolish or move any structure, or has erected, constructed, altered, repaired, moved or demolished a building or structure in violation of a detailed statement or drawing submitted and approved there under, shall be guilty of a misdemeanor, and upon conviction of any such violation such person shall be punished by a fine not to be *less than \$500.00 and not more than \$2000.00*. The owner or owners of any building or premises or part thereof, where anything in violation of this article shall be placed or shall exist, and any architect, builder, contractor, agent, person or corporation employed in connection therewith and who may have assisted in the commission of any such violation shall be guilty of a separate offense and upon conviction shall be fined as herein provided.

Section 111.2.1 Removal of Occupants is added, and shall read:

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

Section 113.1.1 Prohibition of Electrical Service, is added and shall read;

113.1.1 Prohibition of Electrical Service

When any fire hazard is permitted to continue in existence by the owner after receiving the notice provided in Section 110.1 and after expiration of the time limit as determined under Section 110.3 if the Fire Marshal shall find and

determine from the facts that the danger to human life is materially increased by the electrical wiring and appliances present in the building, he shall notify City Public Service of the city to disconnect its service and forthwith cease supplying electric current thereto. It shall thereupon be the duty of the manager of City Public Service to cause said service to be disconnected and the supply of electrical current disconnected immediately.

Section 113.1.2 Prohibition of Gas Service, is added and shall read;

113.1.2 Prohibition of Gas Service

When any fire hazard is permitted to continue in existence by the owner after receiving the notice provided in Section 110.1 and after expiration of the time limit as determined under Section 110.3, if the Fire Marshal shall find and determine from the facts that the danger to human life is materially increased by the gas plumbing and/or appliances present in the building, he shall notify City Public Service to disconnect its gas service and forthwith cease supplying gas thereto. It shall thereupon be the duty of the manager of the City Public Service to cause said service to be disconnected and the supply of gas disconnected immediately.

Section 202, Add to definitions in section 202:

ADDITION. An extension or increase in floor area, number of stories, or height of a building or structure.

HIGH-RISE BUILDING(s). Any building with an occupied floor located more than 50 feet above the lowest level of fire department vehicle access. Any other definition or description described throughout this code shall be disregarded.

FIRE HAZARD shall mean any condition or act which increases or may cause an increase of the hazard or menace of fire to a greater degree than that customarily recognized as normal by persons in the public service regularly engaged in preventing, suppressing or extinguishing fire, or which may obstruct, delay, hinder or interfere with the operations of the fire department or the egress of occupants in the event of fire.

FIRE LANE shall mean any area appurtenant to entrances or exits of a building deemed necessary by the Fire Chief or his designee to remain free and clear of parked vehicles for access to such building in case of fire or other emergency and designated by him as such, and may include sidewalks, driveways, portions of parking lots, or any other area adjacent to or near building entrances or exits, or any fire hydrant.

FIRE MARSHAL shall mean the fire code official responsible for investigations of fires, inspection of facilities, and code enforcement.

FIRE WATCH Qualified individuals are defined as State Certified Fire Inspectors assigned to the Fire Prevention Division of the City of Live Oak, or, if approved by

the Fire Marshal, Texas Certified Firefighters, Peace Officers, individuals employed by a private security firm, or other designated individuals whose sole duty when assigned a fire watch is to perform constant patrols of the premises and keep watch for signs of unwanted fire. A written attendance log must be maintained and personnel must have at least one approved means of notifying the fire department of fire or other emergencies.

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 six or fewer children (including those related to the caregiver) up to the age of eighteen (18) years.

MOBILE FOOD ESTABLISHMENT shall mean a mobile food operation using any heat producing equipment to cook, fry, or warm products for consumption from a motorized vehicle, towable trailer, or watercraft.

PARK shall mean the standing of a vehicle, whether occupied or not, upon a street otherwise than temporarily for the purpose of, and while actively engaged in, receiving or discharging passengers or loading or unloading merchandise or in obedience to traffic regulations, signs, or signals or an involuntary stopping of a vehicle by reason of a cause beyond the control of the operator of the vehicle.

Whenever the word "JURISDICTION" is used in the International Fire Code, it shall be held to mean the City of Live Oak, Texas.

Whenever the words "Chief of the Bureau of Fire Prevention", or "Fire Code Official" are used in the International Fire Code, it shall be held to mean "The Fire Chief."

304.2.1 Dangerous Storing of Combustibles is added and shall read:

304.2.1 Dangerous Storing of Combustibles

It shall be unlawful and a nuisance for any person to have or keep or store, within the city, any quantity of tar, pitch, resin, petroleum or its products, or other combustible materials or substances in such manner that such materials or substances shall be in danger of taking and communicating fire.

Section 307.2, Permit required, is deleted in its entirety.

Section 307.2.1, Authorization, is deleted in its entirety.

Section 307.4, Location, is deleted in its entirety.

Section 307.4.1, Bonfires, is deleted in its entirety.

Section 307.4.2, Recreational Fires, is deleted in its entirety.

Section 307.4.3, Portable Outdoor Fireplaces, is deleted in its entirety.

Section 307.6 Sky Lanterns prohibited is added, and shall read:

307.6 Sky Lanterns

Sky lanterns; also known as Chinese lanterns, sky candles, or fire balloons, which are airborne lanterns constructed of combustible material and contain a candle or fuel cell that when lit, causes the device to go airborne and travel in the air; are prohibited within the city limits.

Section 311.2.2 Fire Protection, exceptions number one (1), two (2), and three (3) are deleted and shall read:

311.2.2 Fire protection

Fire alarm, sprinkler, and stand-pipe systems shall be maintained in an operable condition at all times.

Section 501.3, Construction documents shall read:

Section 501.3 Construction documents

Construction documents for proposed fire apparatus access, location of fire lanes, security gates across fire apparatus access and construction documents and hydraulic calculations for fire hydrant systems shall be submitted to the fire department for review and approval prior to construction.

Upon completion of construction and prior to issuance of a certificate of occupancy, a copy of finished drawings (as built) shall be provided to the fire department in an electronic format, acceptable by the Fire Chief.

Section 501.3.1 Fire Protection Site Plan is added, and shall read:

501.3.1 Fire Protection Site Plan

A Fire Protection Site Plan (labeled as such) shall be submitted electronically in portable document format with the construction documents when application is made for a building permit. Plans must be reviewed and approved by the Fire Marshal and/or fire plan review staff before a building permit is issued. The approved Fire Protection Site Plan will be retained by the City of Live Oak. The Fire Protection Site Plan shall be drawn to scale 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.
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 one thousand (1000) 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 physical damage to fire protection equipment.

Section 503.2.1 Dimensions shall read:

503.2.1 Dimensions

Fire apparatus access roads shall have an unobstructed width of not less than 20 feet, exclusive of shoulders, except where a fire hydrant is located on a fire department access road, in which case the minimum road width shall be 26 feet. An unobstructed vertical clearance of not less than 14 feet and shall be required and maintained at all times. Security gates shall be sized to match the required clear width.

Section 503.2.1.2 Mountable Curbs is added, and shall read:

503.2.1.2 Mountable Curbs

Mountable curbs are permitted when approved by the Fire Marshal.

Section 503.2.3 Surface is amended by adding a second paragraph to read as follows:

503.2.3 Surface

Drivable grass surfaces, or other alternative drivable surfaces, are permitted when approved by the Fire Marshal or his designee.

503.2.4 Turning radius, shall read:

503.2.4 Turning radius

The required turning radius of a fire apparatus access road shall be determined by the fire code official. The turning radii of a fire apparatus access roadway shall require a minimum of 50 feet outside radius and a minimum of 25 feet clear distance to the inside radius on all turns in excess of 30 degrees.

Section 503.2.5, Dead ends shall read:

503.2.5, Dead ends

Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) in length shall be provided with an *approved* area for turning around fire apparatus. Turn arounds approved by the Fire Marshal or as permitted by Appendix D are acceptable. Dead-end fire apparatus access roads located between buildings shall have a 10-foot setback from the edge of the access road to the structures on each side of the road.

Section 503.2.7 Grade is amended to read as follows:

503.2.7 Grade

The gradient for a fire apparatus access road shall not exceed ten percent (10%).

Section 503.3 Marking shall read:

503.3 Marking.

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

Section 503.3.1 Striping is added, and shall read:

503.3.1 Striping

Fire apparatus access roads shall be continuously marked by painted lined of red traffic paint six inches (6") in width to show the boundaries of the lane. The words "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" shall appear in four inch (4") white letters at twenty five feet (25') intervals on the red border markings along both sides of the fire lanes. Where a curb is available, the striping shall be on the vertical and horizontal of the curb.

Section 503.3.2 Signs is added, and shall read:

503.3.2. Signs

Signs, when approved by the fire code official, shall read "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" and shall be twelve inches (12") wide and eighteen inches (18") high. Signs shall be on a white background with letters and borders in red, using not less than two inch (2") tall lettering. Signs shall be permanently affixed to a stationary post and the bottom of the sign shall be six

feet, six inches (6' 6") above finished grade. Signs shall be spaced not more than fifty feet (50') apart along both sides. Signs may be installed on permanent buildings or walls or as approved by the Fire Chief.

Section 503.3.1 Maintenance of markings is added and shall read:

503.3.1 Maintenance of markings

The person in possession of the premises on and into which a fire apparatus access roadway or fire lane is required shall be solely responsible for the maintenance of such roadways or fire lanes and all required signs. No owner, manager, or other person(s) in charge of premises served by a required fire apparatus access roadway or fire lane shall abandon, close, or alter the fire apparatus roadway or any part thereof without permission of the Fire Chief. The person(s) in possession of the premises shall be responsible for ensuring that fire apparatus roadways are clear at all times.

Section 503.4.2 Parking in fire lane is added and shall read:

503.4.2 Parking in fire lane

It shall be unlawful for any vehicle, equipment or device to park in or block a fire lane. Any owner of vehicle, equipment or device found to have parked in or blocking a fire lane shall be cited or have vehicle, equipment, or device removed and impounded by police or the fire department.

Section 503.6 Security Gates, shall read:

503.6 Security Gates

The installation of a security gate(s) across a fire apparatus access road shall be approved by the Fire Chief. Where security gates are installed, they shall be required to have installed on such gate a siren operated sensor, and manual access controls. The siren operated sensor shall open gates when approached by an emergency apparatus. Manual access controls shall open gates during non-emergency responses and serve as a backup in the event that the siren operated sensor fails to operate. The maintenance of access controls and the siren operated sensor system shall be the responsibility of the Owner or Owner's Agent. 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 F2200.

Section 503.6.1 Direction of Swing is added and shall read:

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.

Section 503.6.1.2 Gate timing is added and shall read:

503.6.1.2 Gate timing

Gates must fully open within 15 seconds of activation and remain in the open position until closed by operation of the electrical control device.

Section 503.6.1.3 Fail safe position is added and shall read:

503.6.1.3 Fail safe position

Fire department access gates shall fail safe (open) in the event of a power failure.

Section 503.6.1.4 Gate and entrance design is added and shall read:

503.6.1.4 Gate and entrance design

Gates shall be designed so that the access roadway or turning radius (AASHTO WB50) shall not be obstructed by the operation of the gate. Minimum setback from the public street shall be a distance determined by the City Engineer and shall allow the emergency vehicle the ability to safely operate the lock box or panel without the rear of the vehicle protruding into the street. 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. Turning radius from the public street shall be in accordance with the American Association of State Highway and Transportation Officials (AASHTO) standard, WB50.

Section 503.6.1.5 Access controls is added and shall read:

503.6.1.5 Access controls

Access controls shall be exterior to the gate and located for activation by the vehicle operator without leaving the vehicle. The height of the lock box/control panel shall be 66 inches, measured from the finished grade line of the street.

Section 503.6.1.6 Additional access is added and shall read:

503.6.1.6 Additional access

If required by the Fire Chief, additional "exit only" or "emergency access" gates shall be set up for fire department emergency access. Exit only gates, which are not motorized, shall be installed per the fire department's recommendations. Exit only gates shall have a minimum clearance of 20 feet clear width and be posted with a sign that states "Caution Gate Opens Out", and designated as a Fire Lane. In addition to Fire Lane markings, the markings on the pavement shall include a 5-inch yellow stripe showing the depth of the gate swing.

Section 503.6.1.7 Additional access gate controls is added and shall read:

503.6.1.7 Additional access gate controls

Where motorized, operation of a secondary gate shall be by siren operated sensor.

Section 503.7 Temporary Fire Department Access Roads is added:

503.7 Temporary Fire Department Access Roads shall comply with Section 3304 paragraph 3304.1.5 of the International Building Code.

Section 505.1.1 Building Complex Identification is added and shall read:

505.1.1 Building Complex Identification

A building complex composed of multiple structures shall have an official suite/unit

Section 505.1.2 Graphic Directories is added and shall read:

505.1.2 Graphic Directories

Approved graphic directories shall be provided at all driveway entrances for all multiple-dwelling developments, manufactured home parks, or when required by the Fire Chief. Such directories shall be illuminated, shall conform to the city sign design standards, and shall be approved by the Fire Chief.

Section 505.4 Additional markings and signs is added:

505.4 Additional markings and signs

When required by the fire code official, additional markings or informational signs shall be posted in an approved manner, in conspicuous location(s):

Section 506.1 Where required shall read:

506.1 Where required

Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes, the fire code official is authorized to require a key box to be installed in an approved location. The key box shall be a Knox ® rapid entry system capable of holding the number of keys necessary for operation and access of necessary equipment, doors, and other areas necessary for access as determined and approved by the fire code official. The Knox ® rapid entry system shall be keyed to system code registered for the City of Live Oak Fire Department.

Section 506.1.1 Locks shall read:

506.1.1 Locks

Any lock required by the fire code official for access, or where a lock is placed per request of the owner or manager of the business or property, and the area locked is determined by the fire code official to require access; the lock shall be a Knox ® rapid entry system keyed to the system code registered by the City of Live Oak Fire Department.

Section 506.1.2 Key boxes for non-standardized fire service elevator keys shall read:

506.1.2 Key boxes for non-standardized fire service elevator keys
Key boxes provided for non-standardized fire service elevator keys shall comply with Section 506.1 and all of the following:

1. The key box shall be a Knox ® rapid entry system keyed to the system code registered by the City of Live Oak Fire Department.
2. The front cover shall be permanently labeled with the words “Fire Department Use Only—Elevator Keys.”
3. The key box shall be mounted at each elevator bank at the lobby nearest to the lowest level of fire department access.
4. The key box shall be mounted 5 feet 6 inches (1676 mm) above the finished floor to the right side of the elevator bank.
5. Contents of the key box are limited to fire service elevator keys. Additional elevator access tools, keys and information pertinent to emergency planning or elevator access shall be permitted when authorized by the *fire code official*.
6. In buildings with two or more elevator banks, a single key box shall be permitted to be used when such elevator banks are separated by not more than 30 feet (9144 mm). Additional key boxes shall be provided for each individual elevator or key elevator bank separated by more than 30 feet (9144 mm).

Exception: A single key box shall be permitted to be located adjacent to a *fire command center* or the nonstandard fire service elevator key shall be permitted to be secured in a key box used for other purposes and located in accordance with Section 506.1.

Section 506.2.1 Key Box Access and Removal of Keys is added and shall read:

506.2.1 Key Box Access and Removal of Keys

The Fire Department shall have the only key to the key box. Removal of any key by other than the authorized Fire Department personnel shall be a violation of this Code.

Section 507.3 Fire flow is amended and shall read:

507.3 Fire flow

The approved method to determine the required Fire Flow for buildings or portions of buildings and facilities shall be as per Appendix B of the International Fire Code, 2018 edition. When utilizing Table B105.1 to determine number and distribution of fire hydrants, and the flow requirement falls between the values on the table, the flow requirement shall be rounded up to meet the higher value.

Section 507.4 Water Supply Test is amended and shall read:

507.4 Water Supply Test

Adequacy of the water supply shall be determined by an approved flow test that

is conducted on the fire hydrants nearest the project site. The flow test shall be as follows:

1. The flow test shall have been conducted no more than twelve (12) months prior to the date of construction document submittal to the City of Live Oak.
2. The flow test shall be constructed in accordance with the 2016 edition of NFPA 291, Recommended Practice for Fire Flow Testing and Marking of Hydrants.
3. The flow test results shall be submitted with the construction documents in accordance with the NFPA standard fire flow test format.
4. If the water supply piping is not yet constructed, hydraulic calculations for the proposed piping design shall be submitted. The calculations shall be based on the flow test conducted on the fire hydrants nearest the project site and shall verify that the piping design provides the minimum required fire flow at no less than 25 psi residual. Upon completion of construction and prior to final certificate of occupancy, a flow test shall be conducted to verify the results of the calculations.

507.5.1.2 Additional Locations required is added and shall read:

507.5.1.2 Additional Locations required

Public and/or private fire hydrants are required to be installed where one or more of the following conditions exist:

1. Existing fire hydrants do not meet the required fire hydrant location and spacing criteria defined in Section 507.5.1, or Appendix C.
2. The complexity of the project justifies their installation as determined by the Fire Marshal.

507.5.5 Clear space around hydrants is amended and shall read:

507.5.5 Clear space around hydrants

A 3-foot (914 mm) clear space shall be maintained around the circumference of fire hydrants except as otherwise required or approved. The clear space around hydrant and the access to the hydrant shall be level, unobstructed, and firefighters must be able to operate the hydrant without climbing above surrounding grade level.

507.5.7 Fire Hydrant Installation Criteria is added and shall read:

507.5.7 Fire Hydrant Installation Criteria

Fire hydrants shall be installed per the following criteria:

1. Fire hydrants shall be a minimum of one (1) foot and a maximum of seven (7) feet from the gutter face of the curb.
2. The steamer connection shall be a minimum of one and one-half (1.5) feet and a maximum of two (2) feet above grade.
3. All private hydrants shall be painted red.
4. Fire hydrants shall be right turn only.

5. The steamer connection shall face the street, fire access road or fire lane.
6. The steamer connection size/type shall be approved by the Fire Chief.

Section 508.1.6 Required Features is amended and shall read:

508.1.6 Required Features

The fire command center shall comply with NFPA 72 and shall contain the following features:

1. The emergency voice/alarm communication system control unit.
2. The fire department communications system.
3. Fire detection and alarm system annunciator.
4. Annunciator unit visually indicating the location of the elevators and whether they are operational.
5. Status indicators and controls for air distribution systems.
6. The fire-fighter's control panel required by Section 909.16 for smoke control systems installed in the building.
7. Controls for unlocking stairway doors simultaneously.
8. Sprinkler valve and water-flow detector display panels.
9. Emergency and standby power status indicators.
10. A telephone for fire department use with controlled access to the public telephone system.
11. Fire pump status indicators.
12. Schematic building plans indicating the typical floor plan and detailing the building core, means of egress, fire protection systems, fire-fighting equipment and fire department and the location of fire walls, fire barriers, fire access, partitions, smoke barriers and smoke partitions.
13. An approved Building Information Card that contains, but is not limited to, the following information:
 - 13.1. General building information that includes: property name, address, the number of floors in the building (above and below grade), use and occupancy classification (for mixed uses, identify the different types of occupancies on each floor), estimated building population (i.e., day, night, weekend);
 - 13.2. Building emergency contact information that includes: a list of the building's emergency contacts (e.g., building manager, building engineer, etc.) and their respective work phone number, cell phone number, and e-mail address;
 - 13.3. Building construction information that includes: the type of building construction (e.g., floors, walls, columns, and roof assembly);
 - 13.4. Exit stair information that includes: number of exit stairs in the building, each exit stair designation and floors served, location where each exit stair discharges, exit stairs that are pressurized, exit stairs provided with emergency lighting, each exit stair that allows reentry, exit stairs providing roof access; elevator information that includes: number of elevator banks, elevator bank designation, elevator car numbers and respective floors that they serve, location of elevator machine rooms, location of sky lobby, location of freight

- elevator banks;
- 13.5. Building services and system information that includes: location of mechanical rooms, location of building management system, location and capacity of all fuel oil tanks, location of emergency generator, location of natural gas service;
 - 13.6. Fire protection system information that includes: locations of standpipes, location of fire pump room, location of fire department connections, floors protected by automatic sprinklers, location of different types of automatic sprinkler systems installed (e.g., dry, wet, pre-action, etc.);
 - 13.7. Hazardous material information that includes: location of hazardous material, quantity of hazardous material.
 14. Work table.
 15. Generator supervision devices, manual start and transfer features.
 16. Public address system, where specifically required by other sections of this code.
 17. Elevator fire recall switch in accordance with ASME A 17.1.
 18. Elevator emergency or standby power selector switch(es), where emergency or standby power is provided.
 19. Water flow rates from pressure and flow rate devices.
 20. Certain building rooms and corridor temperature and smoke conditions.
 21. Status of smoke doors and status and operation of smoke pressurization and smoke removal systems.
 22. All communications and control pathways in the building shall be hardened, designed and installed to have increased resistance to failure and increased survivability.

Section 603.5.3 Special day care provision is added and shall read:

603.5.3 Special day care provision

In adult and child day care facilities, unvented fuel burning heaters and portable electric heaters of all types are prohibited.

Section 703.2 identification of protected openings is added and shall read:

703.2 Identification of protected openings

Walls and partitions required to have protected openings (fire walls, fire barriers, fire partitions, smoke barriers, and smoke partitions) shall be permanently identified with signs or stenciling. Such identification shall be above any ceiling or other concealed space. Markings shall be red in color, with at least four (4) inch letters with one half ($\frac{1}{2}$) inch stroke width, and shall be spaced so that no more than ten (10) feet is visible without a marking. Markings shall include the phrase, "Fire Barrier, Protect All Openings".

Section 901.4.6 Pump and riser room size, shall read:

901.4.6 Pump and riser room size

The main fire sprinkler valve assembly and riser area shall be installed inside the building. A door providing direct access from the exterior wall into the room containing fire sprinkler controls may be required by the Fire Chief. The main fire sprinkler valve assembly and riser area shall be installed in accordance with NFPA 13, and shall be equipped with a listed double horizontal or vertical backflow prevention device(s) sized to match riser piping. Clearance around the fire riser and other equipment shall not be less than 36 inches. This room shall be designed and used for fire protection and fire detection equipment only. Fire pump and *automatic sprinkler system* riser rooms shall be provided with a door(s) and an unobstructed passageway large enough to allow removal of the largest piece of equipment.

Section 901.4.6.2 Marking on access doors, shall read:

901.4.6.2 Marking on access doors

Access doors for automatic sprinkler system riser rooms and fire pump rooms shall be labeled with an approved sign. The lettering shall be in contrasting color to the background and reflective. Letters shall have a minimum height of 2 inches (51 mm) with a minimum stroke of 3/8 inch (10 mm).

Section 901.4.6.5 Exterior identification of main fire sprinkler valve assembly and riser area is added, and shall read:

901.4.6.5 Exterior identification of main fire sprinkler valve assembly and riser area

Where an exterior access door is required by the Fire Chief, a weatherproof horn and strobe unit shall be installed on the exterior wall outside of the main fire sprinkler valve assembly and riser area. This horn and strobe shall be installed according to the requirements for a water-flow notification appliance referenced in NFPA 13. It shall be interconnected to actuate concurrently with the water-flow alarm-initiating device of the system, but its placement is in addition to the minimum requirements for water-flow alarm, unless otherwise approved by the Fire Chief.

Section 901.5 Installation Acceptance Testing is hereby amended to read as follows:

901.5 Installation Acceptance Testing.

Fire detection and alarm systems, fire-extinguishing systems, fire hydrant systems, fire standpipe systems, fire pump systems, private fire service mains and all other *fire protection 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.

Section 901.6 Inspection, testing and maintenance is amended by adding Section 901.6.2.3 Maintenance Agreement as follows:

901.6.2.3 Maintenance Agreement.

A maintenance agreement, as defined by Section 202, with a licensed fire protection company shall be provided to the Fire Marshal for each fire protection system at all times. Proof of a maintenance agreement shall be provided during any system acceptance test. Agreements for testing and inspection only as defined by Section 202 shall not be credited with having met this requirement.

Section 901.7 Systems out of service is hereby amended to read as follows:

901.7 Systems out of service.

Where a required *fire protection system* is out of service, 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 shutdown until the *fire protection system* has been returned to service.

A fire watch will be performed at all times that a system is taken out of service. Except for emergencies, the *fire code official* shall be given 72-hours notice before a system is voluntarily taken out of service. When, at the discretion of the Fire Chief or his designee, there is a life safety issue, uniformed employees of the Live Oak Fire Department or other fire watch personnel as *approved* by the Fire Chief or his designee shall perform a fire watch. Fire watch personnel shall be provided with at least one approved means for notification to the fire department dispatch and their sole duty shall be to perform constant patrols and watch for safety hazards and occurrences of fire. The cost of the fire watch shall be at the current overtime rate for fire inspections and shall be the sole responsibility of the owner/contractor to pay. The fire watch fee shall be paid before final approval is granted on system work.

Section 903

Section 903.1 Add:

- (a) Henceforth automatic sprinkler systems must be installed throughout all levels of all new Group A, B, E, F, H, I, M, R-1, R-2, R-4 and S occupancies as defined in the International Building Code (IBC) of more than 500 square feet and throughout all R-3 occupancies as defined in said International Building Code of more than 5,000 square feet. The calculated area shall include all habitable space as well as the area of attached garages or storage facilities. Such systems shall be in accordance with Section 903 of the International Building Code as well as National Fire Protection Association Standards 13D and 13R, 2002 edition, for single-family dwellings.
- (b) The following exceptions are hereby established:
 - (1) Detached gazebos and armadas for residential and public use. Independent buildings such as restrooms or snack shops 400 square feet or less without cooking or heating appliances that are associated with golf courses, parks and similar uses.
 - (2) Detached noncombustible carports or shade canopies.
 - (3) Guardhouses that are less than 300 square feet in size and used to control access to or within residential and/or commercial developments.
 - (4) Detached equipment or storage buildings for commercial use not exceeding 250 square feet.

- (5) Detached residential storage buildings or garages that are not inhabitable and not exceeding 1000 square feet.
 - (6) Barns and agricultural buildings for private, residential, noncommercial use, and not exceeding 3,000 square feet.
 - (7) Detached noncombustible canopies used exclusively for automotive, motor-fuel dispensing stations for private passenger vehicles and not exceeding 5,000 square feet.
 - (8) Manufactured (mobile) homes built in a permanent chassis designed and built as a dwelling unit and recreational vehicles that were not site-built and are portable in nature.
- (c) Retrofit.
- (1) Building additions that equal 50 percent or more of the existing building floor area, or building additions that exceed 10,000 square feet regardless of percentage increase.
 - (2) Two or more building permits, related to area increase, are issued over any three consecutive years.
 - (3) One or more additions are made to an R-3 occupancy and the new total area of the building exceeds 3500 square feet.
 - (4) Building remodels that require structural changes affecting the primary structural system of the existing building

Add Section 903.1.1.2 Existing fire areas increased by an addition shall comply with this code and Chapter 9 of the International Building Code.

Section 903.3.1.2.3 Elevator Machine Room is added and shall read:

903.3.1.2.3 Elevator Machine Room

In all R occupancies or occupancies using a 13R system with elevator systems, the elevator machine room shall be sprinklered as per NFPA 13 standards.

Section 905.2.1 Class-I Reducer is added, and shall read:

905.2.1 Class-I Reducer

A two and one-half (2-1/2) inch by one and one-half (1-1/2) inch reducer shall be provided on Class-I standpipe connections with caps and chains.

Section 905.3 Required installations, Delete the exception.

Section 905.3.1 Building height shall read:

905.3.1 Building height

Class III standpipe systems shall be installed throughout buildings where the floor level of the highest story is located more than 20 feet above the lowest level of the fire department access, or where the floor level of the lowest story is located more than 20 feet below the highest level of fire department vehicle access.

Section 906.5.1 Conspicuous location in Group R occupancies is added and shall read:

Section 906.5.1 Conspicuous Locations in Group R occupancies

In addition to other areas listed herein or in NFPA10, fire extinguishers in R occupancies may also be placed in any of the following locations to satisfy the requirements:

1. On a wall in the unit;
2. Inside a closet, cabinet or pantry as long as the door has a label indicating that there is a fire extinguisher inside;
3. Inside a mechanical closet as long as the door has a label indicating that there is a fire extinguisher inside; or
4. Inside storage closets as long as the door has a label indicating that there is a fire extinguisher inside and there is no locking device on the door that requires a key or combination to open it.

Section 907 Add 907.1.3 Re-inspections or False Alarms exceed Five (5) in a calendar year starting from 1 Jan to 1 Jan the preceding year a municipal court summon/incident can be issued.

Section 907.2, Delete exception to section 907.2.

Section 907.2.1, Delete exception to section 907.2.1.

Section 907.2.2, Delete exception to section 907.2.2.

Section 907.2.3, Delete all exceptions in section 907.2.3.

Section 907.2.4, Delete exception to section 907.2.4.

Section 907.2.6, Delete exceptions to section 907.2.6.

Section 907.2.6.1, Delete exceptions to section 907.2.6.1.

Section 907.2.6.2, Delete exceptions to section 907.2.6.2.

Section 907.2.6.3.3, Delete exceptions to section 907.2.6.3.3.

Section 907.2.7, Delete exception to section 907.2.7.

Section 907.2.8, Delete exceptions to section 907.2.8.

Section 907.2.8.2, Delete exceptions to section 907.2.8.2.

Section 907.2.9.1, Delete exceptions to section 907.2.9.1.

Section 907.2.12, Delete exceptions to section 907.2.12.

Section 912.1 Installation, add to section 912.1:

When single or multiple fire department connections service a building or group of buildings, the piping shall be arranged so that use of any fire department connection will supply the entire building or group of buildings.

Section 912.2 Location, add to section 912.2:

Sprinkler system and standpipe fire department connections shall be:

1. Within forty (40) feet of a public street, approved fire lane, or access roadway;
2. Within one hundred (100) feet of an approved fire hydrant as measured and approved by the Fire Chief.
3. Minimum of two (2) feet above finished grade and a maximum of four (4) feet above finished grade for standard inlets and minimum of 30 inches at lowest point above finished grade and maximum of four (4) feet above finished grade for the fire inlet;
4. The Fire Chief shall approve the location of any freestanding fire department connections;
5. Fire department connections for H occupancies will be freestanding remote and located as determined by the Fire Chief.
6. Where required in automatic or manual fire sprinkler or standpipe systems, fire department connections shall be provided with approved covers.
7. Fire department connection(s) shall be located on the main entrance side of the building or as approved by the Fire Chief, and within 100 feet of a fire hydrant.

Section 912.5 Signs, add to section:

912.5 Signs

An additional metal sign with dimensions ten (10) inches wide and eight (8) inches in height shall be posted not more than 72 and not less than 48 inches from the bottom of the sign to grade level and within 6 feet of the fire department connection. This additional sign shall have a white reflective background and have the letters "FDC" in red reflective material and be permanently affixed to a wall or post. The letters shall be at least 4 inches in height and a ½ inch stroke width.

Section 1003.8 Special Provisions, is added, and shall read:

1003.8 Special Provisions

Rooms in E occupancies used for kindergarten or daycare, children 5 or under, classified as an E occupancy shall not be located above or below the first story.

Section 1008.3.4 Illumination in Group E is added, and shall read:

1008.3.4 Illumination in Group A and Group E

Group E occupancies shall have emergency lighting in interior stairs, corridors, shops, and laboratories, and windowless areas with student occupancy.

Section 1009.2.2 Elevators required, is added, and shall read:

1009.2.2 Elevators required

Where an elevator is required to meet the standards of an accessible means of egress, its construction shall be hardened, designed to withstand a maximum

credible fire scenario without collapse. The structure's fire resistance shall be enhanced to ensure that an uncontrolled fire shall result in a burnout without collapse of the elevator structure. The building's structure shall not depend on the elevator shaft for support. The elevator car shall be of such a size and arrangement to accommodate a 24-inch by 84-inch ambulance stretcher in the horizontal, open position and shall be identified by the international symbol for emergency medical services (star of life). The symbol shall not be less than 3 inches high and shall be placed inside on both sides of the hoist way doorframe. Delete exceptions.

Section 1010.1.9.5 Bolt locks. Delete exceptions; #3, #4, and #5.

Section 2303.2 Emergency disconnect switches, shall read:

2303.2 Emergency disconnect switches

An approved, clearly identified and readily accessible emergency disconnect switch shall be provided at an approved location to stop the transfer of fuel to the fuel dispensers in the event of a fuel spill or other emergency. An emergency disconnect switch for exterior fuel dispensers shall be located within 100 feet (30 480 mm) of, but not less than 20 feet (6096 mm) from, the fuel dispensers. For interior fuel-dispensing operations, the emergency disconnect switch shall be installed at an approved location. Such devices shall be distinctly labeled as: EMERGENCY FUEL SHUTOFF. Signs shall be provided in approved locations and be a minimum of 18 inches high and 24 inches wide.

Section 2303.2.2 Additional Emergency disconnect switches for attended self-service is hereby added as follows:

2303.2.2 Additional emergency disconnect for attended self-service. Attended facilities shall have an additional emergency disconnect switch located inside the building for attendant use at a location approved by the fire code official.

Section 2306.2.1.1 Inventory Control for underground tanks is amended to read as follows:

2306.2.1.1 Inventory Control for underground tanks.

Accurate daily (normal working days only) inventory records shall be maintained and reconciled on all Class I, II or III-A liquid storage tanks for indication of possible leakage from tanks or piping. The records shall be made available for inspection by the Fire Marshal, and shall include, as a minimum, records showing by product: daily reconciliation between sales, use, receipts, and inventory on hand. If there is more than one system consisting of a tank(s), serving pump(s), or dispenser(s) for any product, the reconciliation shall be made separately for each tank system.

1. Daily inventory shall be maintained for each tank system at each location by the operator. The inventory records shall be kept for the past 12 months at the premises.
2. Inventory shall be based on the actual daily measurement and recording daily recording of actual sales, or by readout from an automated gauging system. The inventory records shall include a daily compilation of gain or loss. The mere recording of pump meter reading and product delivery receipts shall not constitute adequate inventory records.
3. The operator of the location shall be held responsible for notifying the owner or person(s) in control of the facility to take action to correct any abnormal loss or gain not explainable by spillage, temperature variations or both causes.
4. The Fire Marshal may require the operator of an underground tank storage system to test the system for tightness, at the operator's expense, when accurate daily inventory records have not been maintained as required or when in his judgment conditions indicate possible leakage of product from the location of such tanks.
5. The Fire Marshal may require copies of Class I, II and III-A liquid storage tank inventories, deliveries or receipt of product sales and dip gauge stick readings or other control measures in addition to copies of any tank tightness or line leakage test results from the station operator, agent, or terminal management.
6. When a service station tank is found to be leaking, its contents shall be removed immediately. If any investigations or tests indicate the source of such loss, the owner shall take immediate action to correct the system failure and remove dangerous spillage from the environment.
7. The Fire Marshal may order the closure of a Service Station by barricading if necessary and the emptying of contents from storage tanks should the operator of a service station be unwilling to cooperate with the Fire Department during the search for the source of such leakage or should the Fire Marshal determine that a hazardous condition exists that merits such action.

Section 2306.2.3 Above-ground tanks located outside, above grade is amended by adding Sections 2306.2.3.1 Inspections, 2306.2.3.2 Required Access, and 2306.2.3.3 Fire Hydrant Access as follows:

2306.2.3.1 Inspections.

An inspection of the installation shall be conducted prior to loading the tank with fuel. For those installations approved by the Fire Chief or his designee to dispense class 1 liquids, the initial loading of fuel shall be witnessed by the fire inspector.

2306.2.3.2 Required Access.

Fire apparatus access roads shall be provided for every aboveground storage tank. The aboveground storage tank shall not be more than 150 feet from fire apparatus access roads as measured by an approved route.

2306.2.3.3 Fire Hydrant Access.

A minimum of one fire hydrant shall be provided for every aboveground storage tank. The aboveground storage tank shall not be located more than 250 feet from a fire hydrant as measured by an approved route.

2308.2.3 Vehicle impact protection is added, and shall read:

2308.2.3 Vehicle impact protection

Vehicle impact protection shall be installed and approved by the Fire Chief.

Section 3405.1 Individual Piles shall read:

3405.1 Individual Piles

Tire storage shall be restricted to individual piles not exceeding 1500 square feet of continuous area. Piles shall not exceed 10 feet in height.

Section 3405.6 Volume more than 150,000 cubic feet is deleted.

Section 5602.1 Definitions is amended by adding a definition as follows:

5602.1 Definitions.

The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

HIGHWINDS. Sustained wind velocity of 15 mph or gusts of 25 mph.

Delete Appendix A, "Board of Appeals".

Section C103.4 Additional Distribution is added, and shall read:

C103.4 Additional Distribution

A fire hydrant shall be located not more than 100 feet from an unobstructed and approved route to a fire department connection (FDC) located at ground level.

The FDC may be installed in an approved remote location, and within 100 feet to a fire hydrant. This distance and route is as approved by the Fire Chief.

II.

PENALTY

Any owner, person, firm, corporation or business entity violating this Ordinance shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined a sum not less than \$500.00 and not to exceed \$2,000.00. Each continuing day's violation under this Ordinance shall constitute a separate offense. The penal provisions imposed under this Ordinance shall not preclude the City from filing suit to enjoin the violation. The City retains all legal rights and remedies available to it pursuant to local, state and federal law.

III.

CUMULATIVE

This Ordinance shall be cumulative of all provisions of ordinances of the City of Live Oak, Texas, except where the provisions of the Ordinance are in direct conflict with the provisions such ordinances, in which event the conflicting provisions of such ordinances are hereby repealed.

**IV.
SEVERABILITY**

It is hereby declared to be the intention of the City Council that the phrases, clauses, sentences, paragraphs, and sections of this Ordinance are severable, and if any phrase, clause sentence, paragraph or section of this Ordinance shall be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs and sections of this Ordinance, since the same would have been enacted by the City Council without the incorporation in this Ordinance of any such unconstitutional phrase, clause, sentence, paragraph or section.

**V.
EFFECTIVE DATE**

This Ordinance has a penalty associated with a violation and shall take effect immediately upon its publication as provided by law. Notice of the enactment of this Ordinance will be given by publishing the Ordinance or its descriptive caption and penalty in the City's official newspaper one time within 30 days of passage.

PASSED, APPROVED and ADOPTED this 27th day of March, 2018.

Mary M. Dennis, Mayor

ATTEST:

Deborah L. Goza, City Secretary

APPROVED AS TO FORM:

City Attorney