ORDINANCE NO. 2594

AN ORDINANCE AMENDING THE CITY CODE OF THE CITY OF WEST DES MOINES, IOWA, 2019, BY REPEALING TITLE 4 (HEALTH AND SAFETY REGULATIONS) CHAPTER 3 (FIRE CODE) AND IN LIEU THEREOF ADOPTING THE 2021 EDITION OF THE INTERNATIONAL FIRE CODE (IFC) REGULATING THE SAFEGUARDING OF LIFE AND PROPERTY FROM FIRE AND EXPLOSIVE HAZARDS IN THE OCCUPANCY OF BUILDINGS AND PREMISES IN THE CITY OF WEST DES MOINES, PROVIDING FOR THE ISSUANCE OF PERMITS AND COLLECTION OF FEES THEREFORE, AND PRESCRIBING THE POWERS AND DUTIES OF THE FIRE PREVENTION BUREAU.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF WEST DES MOINES, IOWA:

SECTION 1: Title 4, Chapter 3, Sections 1 - 11 of the City Code of the City of West Des Moines, Iowa, 2023, is hereby repealed and replaced with the following text.

4-3-1: ADOPTION OF INTERNATIONAL FIRE CODE:

The International Fire Code (IFC), 2021 Edition, published by the International Fire Code Council, is adopted and incorporated herein by this reference as fully as though set forth herein in its entirety, excepting only such portions as are hereinafter added, deleted, modified, or amended.

4-3-2: DUTIES OF FIRE DEPARTMENT:

A. The International Fire Code, as adopted and amended herein, shall be enforced by the Fire Prevention Bureau of the City, which is hereby established and which shall be operated under the supervision of the Chief of the Fire Department.

4-3-3: STORAGE OF FLAMMABLES; DISTRICTS ESTABLISHED:

- A. The establishment of limits and districts referred to and placed upon certain sections of The International Fire Code, 2021 Edition, are as follows:
 - 1. The limits referred to in section 5504.3.1.1 in which flammable cryogenic fluids storage in stationary containers are prohibited are hereby established as follows: The entire City of West Des Moines, Iowa, except (L1) light industrial district and (G1) general industrial district.
 - 2. The limits that are placed on chapter 57 in which outside above-ground storage of flammable or combustible liquids are restricted are hereby established as follows: The entire City of West Des Moines, Iowa, except (L1) light industrial district and (G1) general industrial district.

Exception:

- a. An aggregate amount of one thousand (1,000) gallons or less may be stored above ground on a premise if used exclusively for heating fuel oil. A permit is required and the proposed installation must be approved by the Fire Code Official prior to the issuance of a permit.
- b. After July 20, 1992, any new above ground installations of class I liquids, other than gasoline, shall have an aggregate total of one thousand one hundred (1,100) gallons or less; Gasoline shall have an aggregate total of 5,000 gallons or less. Class II liquids shall have an aggregate total of five thousand (5,000) gallons or less, more than one thousand one hundred (1,100) gallons shall be stored in an approved vaulted tank above ground in L1 and GI zoning districts; or ten thousand (10,000) gallons or less of class I and/or class II liquids on construction sites, per legal lot or contiguous lots under common ownership. A permit is required and the proposed installation must be approved by the Fire Code Official prior to the issuance of a permit. All above ground tanks shall provide approved vehicle impact protection, break away fuel hoses and emergency shut off buttons.
- c. After July 1, 2001, any new outside installation of a generator, the fuel storage shall be limited to a maximum of one thousand five hundred (1,500) gallons of type II fuel in a NFPA/UL compliant sub-base tank; quantities greater than one thousand five hundred (1,500) gallons but less than five thousand one (5,001) gallons of a type II fuel shall be stored in an approved vaulted tank.

Exception: Fuel storage requirements for generator use only, shall not be limited to only L1 and L2 zoning districts.

- 3. The limits that are placed on chapter 57 in which new bulk plants and terminals for flammable or combustible liquids are prohibited are hereby established as follows: The entire City of West Des Moines, Iowa.
- 4. The limits that are placed on section 6104.2 (see section 4-3-4 of this chapter) in which storage of liquefied petroleum gases is to be restricted to are hereby established as follows: The entire City of West Des Moines, Iowa.
- The limits that are placed on section 5601.1 in which storage of explosives and blasting agents is to be restricted to are hereby established as follows: The entire City of West Des Moines, Iowa.
- 6. The limits that are placed on section 5301.1, exception 2, in which the storage of compressed natural gas is prohibited, are hereby established as follows: The entire City of West Des Moines, Iowa, with the exception of L1 and G1 zoning districts.

4-3-4: AMENDMENTS TO INTERNATIONAL FIRE CODE:

The International Fire Code is amended and changed in the following respects:

Amend section 101.1. These regulations shall be known as the *Fire Code* of the City of West Des Moines, hereinafter referred to as "this code."

Amend section 103.1 Creation of agency. The City of West Des Moines Fire Department is hereby created and the official in charge thereof, or a duly authorized representative, 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.

Add section 103.1.1 Definitions.

4-3-2: "DEFINITIONS": Wherever the word "jurisdiction" is used in the International Fire Code, it is the City of West Des Moines, Iowa.

Whenever the words "Department of Fire Prevention" are used, they shall be held to mean "Fire Prevention Bureau".

The word "shall" is mandatory and the word "may" is permissive.

Amend section 105.5 Required Operational Permits. The Fire Code Official is authorized to issue operational permits for the operations as set forth in sections 105.5.3, 105.5.5, 105.5.9, 105.5.10, 105.5.13, 105.5.15, 105.5.16 105.5.18, 105.5.22, 105.5.24, 105.5.27, 105.5.32, 105.5.34, 105.5.38, 105.5.39, 105.5.40, 105.5.42, 105.5.44, 105.5.46, 105.5.49.

Amend section 105.5.29 LP-gas. An operational permit is required for:

1. Storage and use of LP-gas.

Exception: A permit is not required for permanently installed individual containers with 1,000 gallons or less serving one and two family dwellings (R-3), for the typical tank used for LP-gas grills and the use of less than 500 gallons per tank or an aggregate total of less than 1,000 gallons for individual containers for temporary installations.

Delete section 105.5.34 Exception: Recreational fires.

Amend section 105.6 Required construction permits. The Fire Code Official is authorized to issue construction permits for work as set forth in sections 105.6.1, 105.6.6, 105.6.7, 105.6.8, 105.6.9, 105.6.11, 105.6.12, 105.6.13, 105.6.14, 105.6.15, 105.6.19, 105.6.20, 105.6.21, 105.6.22, 105.6.23, 105.6.24, 105.6.25.

Amend section 107 Fees.

Add section 107.2 General. A fee for operational permits and construction permits that are required by this Ordinance shall be paid to the City of West Des Moines at Fire Administration Offices. A permit shall be obtained from the Fire Prevention Bureau prior to engaging in activities, operations, practices, or functions set forth in sections 105.5 through 105.6 as amended. Refer to amended sections 105.5 and 105.6.

Add section 107.7 Fees. Each operational permit fee, with the exception of 105.5.16, 105.5.39 and 105.5.49 shall be \$50.00; this permit includes one hour of inspection time; an hourly rate of \$30.00 after the first hour may be charged by the Fire Code Official; first re-inspection is at no charge during normal business hours (8:00 a.m. to 4:30 p.m., Monday through Friday).

The construction permit/plan review fee schedule is square footage based and shall be as follows:

0-6,000 Square Feet: \$100.00 6,001-12.000 square feet: \$200.00 12,001 - 24,000 square feet: \$300.00 24,001 - 50,000 square feet: \$400.00 50,001 - 100,000 square feet: \$500.00 100,001 - 500,000 square feet \$1,000.00 500,001 - 1,000.00 square feet \$1,500.00

1,000,001 and above: \$1,500.00 + \$100.00 for every 6,000 square feet above 1,000,000

Construction permits include two (2) hours of inspection time; an hourly rate of \$30.00 after the 2nd hour may be charged by the Fire Code Official; first re-inspection is at no charge during normal business hours (8:00 a.m. to 4:30 p.m., Monday through Friday).

-105.6.14 Fee to conduct a firework display is \$200.00 which includes an inspection prior to the start of the show.

-105.6.37 Fees are occupant load based (Occupant load shall be determined by the Fire Code Official) and are as follows:

 Occupant load of 49 or less:
 \$50.00

 Occupant load of 50-499:
 \$100.00

 Occupant load of 500-999:
 \$150.00

 Occupant load greater than 1,000:
 \$200.00

-105.6.47 Fee is \$50.00. If the permit application for the tent or inflatable is not received within 5 business days prior to the date of the event, the fee shall be \$100.00.

This permit includes two hours of inspection time; an hourly rate of \$30.00 after the first hour may be charged by the Fire Code Official; first re-inspection is at no charge during normal business hours (8:00 a.m. to 4:30 p.m., Monday through Friday).

Any inspection to include operational and construction permit inspections, performed after normal business hours (8:00 a.m. to 4:30 p.m., Monday through Friday), shall have inspection fees of \$150.00 per hour per inspector.

Any inspection to include operational and construction permit inspections shall have a first re-inspection at no charge providing it is conducted during normal business hours (8:00 a.m. to 4:30 p.m., Monday through Friday.) Additional re-inspections shall be charged according to the following fee schedule:

Re-inspection Fees: First re-inspection No Charge

Second re-inspection\$100.00Third re-inspection\$300.00Fourth re-inspection\$600.00Fifth or more re-inspection\$1,000.00

All of the above noted fees are base fees and subject to an annual revision, by City Council Resolution, based on a rate equivalent to a positive September Consumer Price Index (CPI-W), and rounded to the nearest whole dollar, for subsequent fiscal year (July 1st).

Add section 107.8 Mitigation Reimbursement Fees. Reimbursement fees that are actual and necessary expenses incurred in carrying out the mitigation of specialized emergencies including, but not limited to, hazardous materials, specialized rescue, and crime scenes (including arson) shall be invoiced to the responsible person, firm, or corporation. An available fee schedule shall be reviewed and posted annually by the Fire Chief's Office. Fees may include, but not limited to, personnel compensation, apparatus use, equipment use, and specialized contract labor associated with the mitigation of the specialized emergency.

Amend section 111: Refer to section 4-3-5(A) (Appeals) of the West Des Moines Fire Code.

Add Section 114.8 Fire-Damaged Premises After Fire Event

Add section 114.8.1 Securing Fire-Damaged Premises After Any Fire Event.

1. The following definitions apply to this section:

"Fire event" means a response by the West Des Moines Fire Department to extinguish a fire within a building, dwelling or other structure that commences with the dispatching of fire department resources and concludes with the fire officer in charge terminating the incident.

"Fire-damaged structure" means a building, dwelling or other structure within the corporate limits of the city that has been partially burned during a fire event.

"Nuisance" means injurious or dangerous to public safety and constituting an emergency requiring immediate abatement pursuant to title 4, chapter 4 of the City Code and/or other applicable City Code section(s).

"Property owner" means the record titleholder(s) and/or contract purchaser(s) of the real property upon which a fire-damaged structure is located.

2. A fire-damaged structure in an unsecured condition may be determined by a designated fire department official, in his or her sole discretion, to constitute a nuisance.

- 3. The designated fire department official may but is not required to give notice to the property owner(s) of such a determination of nuisance requiring immediate abatement, and opportunity for a hearing regarding the existence of the nuisance pursuant to section 4-4-10 of this code which may be held if practical under the circumstances, but shall not be required to be held if impractical under the circumstances, prior to abatement of the nuisance by the property owner or the city.
- 4. A fire-damaged structure determined to constitute a nuisance shall be secured by the property owner(s), at the property owner's sole expense, in accordance with this section and within the time allowed by the designated fire department official, in his or her sole discretion, unless the designated fire official determines that securing of the fire-damaged structure during the fire event is required.
- 5. Prior to securing a fire-damaged structure determined to constitute a nuisance, the property owner(s) shall remove or cause to be removed all living beings from such structure.
- 6. The property owner(s) shall secure all windows, doors, and other structural openings of the fire-damaged structure determined to constitute a nuisance to prevent access by unauthorized persons.
- 7. A fire-damaged structure determined to constitute a nuisance which cannot be properly secured from access to the interior by the use of window locks, door locks, padlocks, or other appropriate locking mechanisms, shall be secured by the property owner(s) as follows:
 - a. Completely enclosing and continually maintaining over all structural openings (windows, doors, roof openings) on the exterior of such fire-damaged structure with materials approved by the fire Fire Code Official prior to installation; and/or
 - b. Completely enclosing and continually maintaining such fire-damaged structure with a temporary snow fence of not less than forty-eight (48") inches in height; and/or
 - c. On site security as shall be required as deemed necessary by the fire Fire Code Official; and/or
 - d. By any different and/or additional measures set forth in any written notice given by the designated fire department official to the property owner(s).
- 8. If the property owner(s) fails to secure a fire-damaged structure determined to constitute a nuisance in accordance with the requirements of this section, or if the designated fire official determines that securing of the fire-damaged structure during the fire event is required, the fire chief or his or her designee, which designee may include the public services department director or his or her designee, may cause such fire-damaged structure to be secured and assess the costs thereof against the real property upon which such fire-damaged structure is located for collection in the same manner as a property

- tax, following hearing, if requested, in accordance with title 4, chapter 4 of the City Code and/or other applicable City Code sections.
- 9. Property owner(s) shall be joint and severally liable for performing the actions required by this section and for any property assessments arising from failure to perform such actions.

Add Section 114.8.2. Abandoned Fire-Damaged Premises After Any Fire Event.

- 1. Fire-damaged structure which persistently or repeatedly become unprotected or unsecured, which have been occupied by unauthorized persons or for illegal purposes or which present a danger of structural collapse, fire spread to adjacent properties, risk to emergency responders or are deemed a nuisance due to no active rehabilitation, repairs or removal of the structural within eighteen (18) months of the date of the fire event; shall be considered to be abandoned, declared unsafe and abated by demolition in accordance with the *International Property Maintenance Code* and the *International Building Code*.
- 2. If the property owner(s) fails to demolish an abandoned fire-damaged structure as defined in this section, the fire chief or his or her designee may cause such fire-damaged structure to be demolished and assess the costs thereof against the real property upon which such fire-damaged structure is located for collection in the same manner as a property tax, following hearing, if requested, in accordance with title 4, chapter 4 of the City Code and/or other applicable City Code sections.

Add section 115 Life Safety Contractor/Designer Permits. All installations, modifications, maintenance, or servicing of life safety systems are to be performed by an approved State of Iowa licensed business or person(s). A business or person(s) shall obtain a permit to do work in the City of West Des Moines from the Fire Administration Office.

Add section 115.1 Life Safety Plans. All life safety plans submitted for review to include, but not limited to, fire sprinkler system plans, fire alarm system plans, fire pump plans, hood suppression system plans, and clean agent system plans shall be designed and stamped by a person with a minimum of a NICET III certification, fire protection engineer, qualified engineer with two (2) years demonstrated experience in life safety system design, or equivalency as determined by the Fire Code Official. Plan approval will be based upon the plans submitted by the equipment supplier utilizing the above requirements. All NEW fire sprinkler systems, fire alarm system, fire pumps, clean agent systems, kitchen hood suppression systems shall be submitted to West Des Moines contracted third party engineer for review. A copy of the application and fee schedule can be obtained from the West Des Moines Fire Department web site or at West Des Moines Fire Administration. The Fire Code Official has the authority to require additions to existing fire sprinkler systems and fire alarm systems to be sent to the West Des Moines contracted third party engineer for review. If required life safety plans are not received at the West Des Moines Fire Department prior to 7 days before the final certificate of occupancy inspection is scheduled, a fee of \$200 shall be paid by the submitting company prior to the inspection taking place and the inspection will be re-scheduled for a date as determined by the Fire Code Official.

Add Section 115.1.1 Life Safety Plan Submittal Fee For Internal Fire Department Review.

Life Safety plans submitted for initial review that are not required to go to the West Des Moines contracted third party engineer by the Fire Code Official shall pay a review fee of \$100.00. Plans that are required to be reviewed by the West Des Moines contracted third party engineer are not subject to this fee.

Note: Persons passing the competency-based examination are only allowed to stamp plans for the company through which they are licensed to work.

The above noted \$100 fee is a base fee and subject to an annual revision, by City Council Resolution, based on a rate equivalent to a positive September Consumer Price Index (CPI-W), and rounded to the nearest whole dollar, for subsequent fiscal year (July 1st).

Add section 115.2 Penalties for Violation of State Licenses/Life Safety Contractor/Designer Permits. Violation of rules and regulations pertaining to State licensing/Life Safety Contractor/Designer Permits shall result in a fine of \$500.00 for the first violation. A second violation within one (1) year of permit issuance shall result in a fine of \$750.00. A third violation within one (1) year of permit issuance shall result in a fine of \$1,000.00 and revocation of the permit for the remainder of the permit issuance period.

Add section 116 Inspection Tags. West Metro tags for inspection of fire suppression systems, fire extinguishers, and fire alarm systems are required to be purchased from the West Des Moines Fire Prevention Bureau for use in the City of West Des Moines.

Add section 117 Additions to Buildings or Structures

Add section 117.1 General. Additions to buildings or structures shall comply with all of the requirements of section 903.2 of this Code for new buildings or structures. The entire building or structure, existing and proposed additions, shall comply with all of the requirements of the fire sprinkler section 903.2 of the Fire Code for new buildings and structures, when the total of all the additions to the building or structure made after November 15, 1973, exceeds twenty-five (25) percent of the pre-November 15, 1973, gross area of the building or structure.

Add section 118: Multiple Occupancy Requirement.

Add section 118.1 General. When a building is used for more than one occupancy purpose or use, the entire building shall meet the requirements of the fire sprinkler section 903.2 of the Fire Code based on the requirements for the most restrictive occupancy group as defined in Chapter 2 of the 2021 International Fire Code.

Chapter 2 DEFINITIONS

Amend Section 202 [M] Commercial Cooking Appliances:

[M] Commercial Cooking Appliances. Appliances used in a commercial food service establishment for heating or cooking food and which produce grease vapors, steam, fumes, smoke or odors that are required to be removed through a local exhaust ventilations system. Such appliances include deep fat fryers; upright broilers; griddles; broilers; steam-jacketed kettles; hot-top ranges; under-fired broilers (Charbroilers); ovens; barbecues; rotisseries; residential stoves/ovens and similar appliances. For the purpose of this definition, a food service establishment shall include any commercial building or a portion thereof used for the preparation and serving of food including for employee purposes.

Delete section 202 Occupancy Classification [BG] Small buildings and tenant spaces and Exceptions 1 and 2 under [BG] Small assembly spaces.

Add to section 202 Business is a commercial enterprise or establishment that is not part of a home occupation, for the purposes of this Ordinance.

Add to section 202 Commercial Buildings or Structures are buildings or structures that are used for purposes other than detached dwellings, for the purposes of this Ordinance.

Add to section 202 Condominium is a building or structure of residential occupancies containing sleeping units or more than two dwelling units where the occupants are primarily permanent in nature, having public space, unless as defined as a townhouse, for the purposes of this Ordinance.

Add to section 202 Dwelling is a detached building on a building site designed for and used exclusively for residential purposes by one or two families and containing one or two dwelling units, for the purposes of this Ordinance.

Add to section 202 Apartment Building is a building containing two or more dwelling units, at least one of which is located all or in part above another dwelling unit. (Stacked flat)

Add to section 202 Fire Prevention Bureau is the Fire Department of the jurisdiction.

Add to section 202 Home Occupation is any occupation or profession conducted solely by the resident occupants in their place of abode, involving primarily service and limited sale of commodities upon the premises, for the purposes of this Ordinance.

Add to section 202 Licensed Day Care is a daycare that is licensed with the State of Iowa.

Add to section 202 Licensed Fire Alarm Monitoring Service is a business that supplies and/or contracts with a UL listed remote station monitoring service.

Add to section 202 Self-luminous is having the ability to self generate light without the aid of batteries or electrical current.

Add to section 202 Townhouse is a single-family dwelling unit constructed in a group of three or more attached units in which each unit extends from foundation to roof and with open space

on at least two sides, for the purpose of this Ordinance.

Add to section 202 WestCom is the dispatch center that is jointly shared by the Cities of Clive, Urbandale, and West Des Moines.

Chapter 3 GENERAL REQUIREMENTS

Add section 307.2.1.1 Responsible Agencies for Open Burning. Within the City limits of West Des Moines; in Polk County, approval from Polk County Water, Air and Waste Management Department, and the Fire Code Official; in Dallas County, Warren County and Madison County, approval from State of Iowa DNR and the Fire Code Official; future annexed land shall use the County Water, Air and Waste Management Department of record, and/or DNR and the Fire Code Official.

Add section 307.2.1.2 Business that sell fire pits, chiminea and other outdoor recreational devices. Within the City limits of West Des Moines, any business that sells fire pits, chiminea and other outdoor recreational fire/ember producing devices are required to have signage installed on the display devices notifying customers they are not allowed to be used within the City limits of West Des Moines.

Delete sections 307.4.1, 307.4.2, 307.4.3 (Including the exception), and 307.5.

Replace with: 307.4.1 Bonfires are only allowed with a permit issued by the West Des Moines Fire Prevention Bureau. The only firepits or portable outdoor fireplaces that are allowed to be used within the city limits of West Des Moines are those that do not produce smoke.

Amend section 308.1.4 Open-flame Cooking Devices.

No barbeque grills or other devices which produce ashes or embers shall be operated or stored within 20 feet of multi-story buildings, such as apartment buildings and/or condominiums. Cooking devices and/or propane cylinders shall not be stored inside the living unit of apartment buildings and/or condominiums.

A maximum of one 20 lb. propane cylinder attached to the cooking device shall be allowed per living unit.

Exception: One and two-family dwellings and townhouses.

Amend section 311.3 Removal of Combustibles.

Persons owning, or in charge or control of, a vacant building, or portion thereof, shall remove therefrom all accumulations of combustible materials, flammable or combustible waste or rubbish and shall securely lock or otherwise secure doors, windows and other openings to prevent entry by unauthorized persons. All locks and methods to secure windows, doors and other openings shall be approved by the Fire Code Official prior to installation and shall be continually maintained by the persons owning or in charge or control of the building. On site security shall be required as deemed necessary by the Fire Code Official. The premises shall be

maintained clear of waste, vegetation, or hazardous materials. All fire hydrants located on the premises shall be operational and maintained.

Add Section 311.7 Compliance

The fire code official may notify the person(s) owning, or in charge or control of, a vacant building, structure, premises or portion thereof (collectively "premises") of failure to comply with any of the requirements of Sections 311.2 to 311.6 and may require compliance by such person(s) within the time set forth in the notice. If compliance does not occur within the time set forth in the notice, the fire chief or his or her designee may seek available remedies, including but not limited to abatement and assessment of costs pursuant to title 4, chapter 4 of the city code, the *International Property Maintenance Code*, or the *International Building Code* as applicable.

Add section 322 Existing Building Life Safety Requirements.

Add section 322.1 Minimum Life Safety Requirements. Each existing building/tenant space shall have exit signs, emergency lighting, fire extinguishers, and rated protection of the gas appliances, such as furnace and water heater rooms. Specifications for the above noted items are listed in the latest West Des Moines Fire Code Supplement.

FIRE SERVICE FEATURES

Add section 503.1.4 Outdoor Venue Access. A 10 ft. wide emergency access road designed to support 36,000 lb. weight load shall be provided within 350-feet of all portions of an outdoor venue (e.g. soccer complex, park, skate park, sports fields) to facilitate emergency vehicle access.

Exception: The Fire Code Official is authorized to increase the dimension of 350 feet where emergency access roads cannot be installed because of location on property, topography, waterway, nonnegotiable grades, or other similar conditions, and an approved alternative means of emergency access is provided.

Amend section 503.2.1 Dimensions. Fire apparatus access roads shall have a minimum unobstructed width of not less than 20 feet exclusive of shoulders, except for approved security gates in accordance with section 503.6, and an unobstructed vertical clearance of not less than 14 feet. All drive under canopies shall have their height posted on them in a location or locations approved by the Fire Code Official.

Amend section 505.1 Premises Identification. New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers or addresses shall be black or white and shall contract with their background. Where required by the Fire Code Official, address numbers shall be provided in greater dimension or 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 numbers shall be maintained.

Address numbers shall be in Arabic numerals or alphabet letters a minimum of 4 inches in height with a minimum stroke width of 1/2 inch.

Exceptions:

- 1. Color of numbers may deviate from black or white for just cause when approved by the Fire Code Official.
- 2. All commercial buildings shall have address numbers in Arabic numerals or alphabet letters a minimum of 5 inches in height with a minimum stroke width of 1/2 inch. Monument signs shall have the address installed a minimum of 36 inches from the ground. Addresses located 100 to 199 feet from the street shall have be a minimum of 6 inches in height with a minimum stroke width of 1/2 inch. Addresses located 200 to 299 feet from the street shall have a minimum of 8 inches in height with a minimum stroke width of 1 inch. For each additional 100 feet from the street, the number shall increase by an additional 2 inches in height with the stroke increased proportionally. Measurements to determine the minimum number or letter size shall be measured from the approved address location to the center line of the street for which the premise is addressed. Minimum height and minimum stroke may be increased by the Fire Code Official.
- 3. Exterior suite numbers shall be a minimum of 4 inches in height with a minimum stroke width of 1/2 inch.
- 4. Interior suite numbers shall be a minimum of 2 inches in height.
- 5. Exterior address location for commercial buildings shall be determined by the Fire Code Official.

Add section 506.3 Location for Knox Box. The location of the key box, "Knox Box", is to be determined by the Fire Code Official. Height of the key box shall be 6 feet from the ground to the top of the key box unless otherwise approved by the Fire Code Official.

Delete Code section 507.5.1.1

Replace with the following language:

507.5.1.1 Hydrant for fire department connections.

Buildings equipped with a fire department connection installed in accordance with Section 912 shall have a fire hydrant located on a fire access road within 100 feet (30 m) of the fire department connection as measured by an approved route around the exterior of the building.

Exception: The distance shall be permitted to exceed 100 feet (30 m) where approved by the Fire Code Official.

Amend Code section 507.5.5

Clear Space Around Fire Hydrants:

A 5-foot (1524 mm) horizontal clear space shall be maintained around the circumference of fire hydrants, as measured from the center-point of the hydrant, except as otherwise required or approved.

Add section 507.5.7 Fire Hydrant Markers and Identification Color. When required by the Fire Code Official, hydrant locations shall be identified by the installation of an approved reflective marker. Both public and private hydrants shall be painted to West Des Moines Water Works specifications.

Add section 507.5.8 Fire Hydrant Installation. Fire hydrants installed with the grade mark on the fire hydrant at the level of finished grade. The large diameter connection shall be installed such that the connection is oriented facing the fire department access road for fire apparatus hook-up.

Add section 507.5.9 Fire Hydrant Maintenance Schedule. Private fire hydrants shall be inspected, tested, and lubricated on a five-year basis or sooner by the West Des Moines Water Works in conjunction with their regular fire hydrant inspection program per rules established by the West Des Moines Water Works.

Amend Code section 508.1 Replace with the following language:

508.1 General. Where required by other sections of this code, Table 508.1 and in all buildings classified as high-rise buildings by the International Building Code, a fire command center for fire department operations shall be provided and shall comply with sections 508.1.1 through 508.1.6.

Add Table 508.1 Fire Command Center Thresholds.

Group A	1,000 occupants
Group E	100,000 gross square feet
Group F	200,000 gross square feet
Group H	100,000 gross square feet
Group I-2 or I-3	100,000 gross square feet
Group M	100,000 gross square feet
Group R-1	Greater than 200 dwelling units or sleeping rooms
Group S	200,000 gross square feet

Add section 511 Fire and Emergency Vehicle Lanes.

511.1 General. Fire Department fire lanes shall be provided and maintained in accordance with section 511.

511.2 Purpose. The requirement that Fire Lanes be established in certain parking areas and the

enforcement of restrictions on parking in such Fire Lanes established in this Chapter are designed to ensure adequate access to commercial, office, multi-family, and other high density use facilities by fire-fighting and other emergency vehicles.

- **511.3 Designation.** The Fire Code Official may designate fire lanes on private and public property as deemed necessary for the protection of life and property.
- **511.4 Obstruction.** No person shall stop, stand, park a vehicle, place, or keep any obstruction or thing in a designated fire lane that would prevent such fire lane from being immediately accessible to the Fire Department, or in any other manner to deter or hinder the Fire Department from gaining immediate access to the fire lane. A written request to the Fire Code Official for temporary obstruction of a fire lane shall be submitted for approval.
- shall cause appropriate signs and markings to be placed identifying such fire lanes. Fire lanes may be painted traffic red in addition to fire lane signage. Fire lane signs shall be permanently mounted and the front of the sign set at 90 degrees to the street facing the direction of travel, or as otherwise approved by the Fire Code Official. Fire lane signs shall be placed 2 4 feet from the edge of the street. The top of fire lane signs shall be approximately 6 feet from the ground. Intermediate fire lane signs shall be set every 100 feet in a continuous fire lane. The BEGINS sign shall mark the beginning of a fire lane and shall be mounted below the first fire lane sign. The ENDS sign shall mark the ending of a fire lane and shall be mounted below the last fire lane sign. The BEGINS and ENDS signage may be omitted due to the location of the fire lane by the Fire Code Official. Signs shall be 18 inches tall x 12 inches wide with red letters on a white reflective background to read "Fire Lane-No Parking Except for Emergency Vehicles, Fine \$50", unless otherwise directed and approved by the Fire Code Official, conforming to State law.
- **511.6 Maintenance.** The owner, manager, tenant or person in charge of any property upon which designated fire lanes have been established, shall provide markings as required above and shall maintain fire lanes at their expense as often as needed to clearly identify the designated area as being a fire lane.

BUILDING SERVICES AND SYSTEMS

Delete sections 605.8, 605.8.1, 605.8.2, 605.8.3, 605.8.4, and 605.8.5.

Amend section 705.2.4 Door Operation.

Swinging fire doors shall close from the fully open position and latch automatically. The door closer shall:

- 1. Exert enough force to close and latch the door from any partially open position.
- 2. Be UL fire listed and of hydraulic type, spring type shall not be allowed.

INTERIOR FINISH

Delete section 806.1.1 Restricted Occupancies: Exception 2. "Trees shall be allowed within dwelling units in Group R-2 occupancies."

FIRE PROTECTION SYSTEMS

Add section 901.4.7.1.1 Fire Sprinkler Riser Room.

A fire sprinkler riser room shall be separated from the electrical room. The riser room shall have no electrical panels, devices, or apparatus inside the room other than the outlets or support equipment (lighting, air compressor, and heater) required for the use of the fire sprinkler system and/or the fire alarm panel. The sprinkler riser room shall not be exclusively accessed from the electrical room, but the electrical room may be accessed from the riser room.

Add section 901.4.7.1.2 Fire Sprinkler Riser Signage. Signage as determined by the Fire Code Official shall be placed on the main sprinkler riser denoting a shunt trip has been installed

Amend section 903.2

Pursuant to the approved recommendations of the Central Iowa Code Consortium, the following exception is being utilized in this code:

Prior to July 1, 2016, any jurisdiction calculating fire areas by other methods not defined by the International Fire Code or International Building Code, may continue to utilize those methods in calculating fire sprinkler square footage requirements as previously established by local jurisdiction.

Where required to read as follows. An approved automatic fire extinguishing system is required if the gross square footage of a building is equal to or greater than the following:

For the purposes of section 903.2, "fire separations" shall not be permitted to reduce the total gross square footage of a building or area for the purpose of calculating the fire sprinkler square footage requirements.

For the purposes of section 903.2, "story" shall be defined as any level of a structure, whether above or below grade capable of occupancy.

Fire Sprinkler Exemption for Buildings or Structures. To be exempt from meeting the requirements to have fire sprinklers systems installed, the buildings or structures per legal lot or contiguous lots under common ownership, must be separated by twenty feet (20') and have 1-hour rated exterior walls on both buildings or structures so as not to have the combined total of their gross square footage applied to this section of the Code. Note: The square footage used for calculating total "gross square footage" of a building or structure shall be measured using the outside dimensions of the total building or structure to include attached or detached buildings or structures/canopies meeting the above requirements.

Open Corridors/Hallways shall be required to have fire sprinklers installed in them when the building they are constructed in is required by this code to have a fire sprinkler system.

"An approved automatic fire extinguishing system" includes, but is not limited to, a complete automatic fire sprinkler system. The following sections requiring complete automatic fire sprinkler systems shall install the fire sprinkler system following NFPA 13 standards unless otherwise noted. Alternative automatic extinguishing systems may be used if in the opinion of the Fire Code Official the same life safety and property conservation measures are equivalent to the NFPA standard listed in this Code.

Delete sections 903.2.1, 903.2.1.1, 903.2.1.2, 903.2.1.3, 903.2.1.4, 903.2.1.5, 903.2.1.5.1, 903.2.1.6, 903.2.1.7, 903.2.2, 903.2.3, 903.2.4, 903.2.4.1, 903.2.4.2, 903.2.4.3, 903.2.5, 903.2.5.1, 903.2.5.2, 903.2.5.3, 903.2.6, 903.2.7, 903.2.7.1, 903.2.8, 903.2.8.1, 903.2.8.2, 903.2.8.3, 903.2.8.4, 903.2.8.4, 903.2.9, 903.2.9.1, 903.2.9.2, 903.2.9.3, 903.2.9.4, 903.2.10, 903.2.10.1, 903.2.10.2

Add section 903.2.1 Group A to read as follows: An automatic sprinkler system shall be provided throughout all buildings used as Group A occupancies as provided in this section.

(suppression type)

(min. gross square footage)

Group A:

NFPA 13

A-1. Building or structures or portions thereof, having an assembly use, usually with fixed seating, intended for the production and viewing of the performing arts or motion pictures including, but not limited to: See IFC occupancy classification definition A-1.*

Occupant load of 299 or less.
 Occupant load of 300 or more.

6,000 s.f.

0 s.f.

NFPA 13

A-2. Building or structures or portions thereof, having an assembly use intended for food and /or drink consumption including but not limited to:

See IFC occupancy classification definition A-2. *

Occupant load of 50 or more.
 Occupant load of 49 or less.

0 s.f.

1,500 s.f.

NFPA 13

A-3. Building or structures or portions thereof, having an assembly use intended for worship, recreation, or amusement and other assembly uses not classified elsewhere in Group A, including, but not limited to: See IFC occupancy classification definition A-3. *

1. Occupant load of 299 or less.

6,000 s.f.

4,500 s.f. 2. Occupant load of 300 or more. A-4. Building or structures or portions thereof, NFPA 13 having an assembly use intended for viewing of indoor sporting events and activities with spectator seating, including but not limited to: See IFC occupancy classification definition A-4 * 6,000 s.f. 1. Occupant load of 299 or less. 4,500 s.f. 2. Occupant load of 300 or more. A-5. An automatic sprinkler system shall be provided

NFPA 13

for Group A-5 occupancies in the following areas: concession stands, retail areas, press boxes and other accessory areas in excess of 1,000 square feet.

1,000 s.f.

Add section 903.2.2 Group B to read as follows: An automatic sprinkler system shall be provided throughout all buildings containing a Group B occupancy as provided in this section.

Group B:

NFPA 13

B. Building or structures or portions thereof, used for office, professional, or service type transactions, including storage of records and accounts. Business occupancies shall include, but not be limited to: See IFC occupancy

6,000 s.f.

classification definition B.

Add section 903.2.3 Group E to read as follows: An automatic sprinkler system shall be provided throughout all buildings containing a Group E occupancy as provided in this section.

Group E:

E. Building or structures or portions thereof, NFPA 13

used by six or more persons at any one time for

educational purposes.

1,500 s.f.

A licensed day care is any buildings or structures, NFPA 13

or portions thereof, used for educational, supervision, or personal care services for more than five children older than 2 1/2 years of age shall be classified as

an E occupancy.

0 s.f.

Add section 903.2.4 Group F to read as follows: An automatic sprinkler system shall be provided throughout all buildings containing a Group F occupancy as provided in this section.

Group F:

NFPA 13	F-1. Moderate-hazard factory and industrial occupancies including factory and industrial uses not classified as group F, division 2 occupancies shall include, but not be limited to: See IFC occupancy classification definition F-1.	6,000 s.f.
NFPA 13	F-1.1. Woodworking operations which generates finely divided combustible waste or uses finely divided combustible materials.	2,500 s.f.
NFPA 13	F-1.2. Distilled spirits. An automatic sprinkler system Shall be provided throughout a Group F-1 occupancy Used for the manufacture of distilled spirits.	0 s.f.
NFPA 13	F-1.3. Buildings or structures or portions thereof, used for the manufacture of upholstered furniture or mattresses.	2,500 s.f.
NFPA 13	F-2. Low-hazard factory and industrial occupancies uses that involve the fabrication or manufacturing of non-combustible materials which during finishing, packing, or processing do not involve a significant fire hazard shall include, but not be limited to: See IFC occupancy classification definition F-2.	15,000 s.f.

Add section 903.2.5 Group H to read as follows: An automatic sprinkler system shall be provided throughout all buildings containing a Group H occupancy as provided in this section.

Group H:

NFPA 13	H-1. Building or structures or portions thereof, that pose a detonation hazard in excess of those listed in table 307.7(1) (see 2015 IBC) shall include, but not limited to: See IFC occupancy classification definition H-1.	0 s.f.
NFPA 13	H-2. Building or structures or portions thereof, which contain materials that pose a deflagration hazard or a hazard from accelerated burning in excess of those listed in table 5003.1.1(1) (see IFC 2018) shall include, but not limited to:	

	See IFC occupancy classification definition H-2.	0 s.f.
NFPA 13	H-3. Building or structures or portions thereof, which contain materials that readily support combustion or pose physical hazard in excess of those listed in table 5003.1.1 (1) (see IFC 2018) shall include, but not limited to: See IFC occupancy classification definition H-3.	0 s.f.
NFPA 13	H-4. Building or structures or portions thereof, which contain materials that are health hazards in excess of those listed in table 5003.1.1(1) (see IFC 2018) shall include, but not limited to: See IFC occupancy classification definition H-4.	0 s.f.
NFPA 13	H-5. Semiconductors fabrication facilities and comparable research and development areas in which hazardous production materials (HPM) are used, and the aggregate quantity of material is in excess of those listed in table 5003.1.1(1) and table 5003.1.1 (2) (see IFC 2018). Such facilities and areas shall be designed and constructed in accordance with section 415 of the IBC 2018. Design of the sprinkler system shall not be less than table 903.2.5.2. (IFC 2018)	0 s.f.
NFPA 13	Pyroxylin plastics. Buildings or structures where cellulose nitrate film or pyroxylin plastics are manufactured, stored, or handled in quantities	
	exceeding 100 pounds.	0 s.f.

Add section 903.2.6 Group I to read as follows: An automatic sprinkler system shall be provided throughout all buildings containing a Group I occupancy as provided in this section.

Group I:

NFPA 13D or NFPA 13 I-1. Building or structures or portions thereof, housing more than 16 persons, on a 24-hour basis, who because of age, mental disability, or other reasons, live in a supervised residential environment but which provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. A facility such as the above with five or fewer persons shall classified as group R-3. A facility such as the above with at least six and not more than 16 persons

	shall be classified as Group R-4.	0 s.f.
NFPA 13	I-2. Building or structures or portions thereof, used for medical, surgical, psychiatric, nursing, or custodial care on a 24-hour basis of more than four persons who are not capable of self-preservation. A facility such as the above with four or fewer persons shall be classified as Group R-3. Child care facility is any buildings or structures, or a portion thereof, which provides care on a 24-hour basis to more than five children 2 ½ years of age or less shall be classified as Group I-2.	0 s.f.
NFPA 13	I-3. Building or structures or portions thereof, which are inhabited by more than five persons who are under restraint or security. See IFC occupancy classification definition I-3 for type of condition.	0 s.f.
NFPA 13	I-4. Building or structures or portions thereof, which are occupied by persons of any age who receive custodial care for less than 24 hours by individuals other than parents or guardians, relatives by blood, marriage, or adoption and in a place other than the home of the person receiving care. A facility such as the above with five or fewer persons shall be classified as group R-3. Place of worship during religious functions is not included.	0 s.f.
NFPA 13	Adult care facilities provide accommodations for less than 24 hours for more than five unrelated adults and provides supervision and personal care services. Child care facilities provide supervision and personal care on less than a 24 hour basis for more than five children 2 ½ years of age or less.	0 s.f.

Add section 903.2.7 Group M to read as follows: An automatic sprinkler system shall be provided throughout all buildings containing a Group M occupancy as provided in this section

Group M:

NFPA 13

Building or structures or portions thereof, for the display and sale of merchandise, and involving stocks of goods, wares, or merchandise, incidental to such purposes and accessible to the public shall include, but not be limited to: See IFC occupancy

classification definition group M.

6,000 s.f.

For high-piled storage requirements, refer to chapter 32 of the IFC 2018 and the WDM Fire Code.

Buildings or structures or portions thereof used for the display

And sale of upholstered furniture or mattresses.

5,000 s.f.

Add section 903.2.8 Group R to read as follows: An automatic sprinkler system shall be provided throughout all buildings containing a Group R occupancy as provided in this section

Group R:

NFPA 13 To include Attic space NFPA 13 To include Attic space	R-1. Hotels, motels, boarding houses (transient). (Occupy less than 30 days) R-2. Apartment houses, condominiums, boarding houses (non-transient), convents, dormitories, fraternities and sororities, monasteries	0 s.f.
NFPA 13 to include attic space	Convents dormitories fraternities and sororities monasteries	0 s.f.
NFPA 13D	R-3. Dwellings Garage area included in total gross square footage calculate	8,000 s.f.
NFPA 13D	R-3. Townhouse	

Townhouses that are not open on at least two sides, are required to install fire sprinkler systems and maintain fire separation requirements as set forth in the IBC 2018.

Townhouses that are side by side where the entire row measures 12,000 square feet or greater are required to install fire sprinkler systems and maintain fire separation requirements as set forth in the IRC 2018.

NFPA 13D	R-4. Residential care/assisted living facilities	
or	for more than five but not more than 16 occupants,	
NFPA 13	excluding staff.	0 s.f.

Add section 903.2.9 Group S to read as follows: An automatic sprinkler system shall be provided throughout all buildings containing a Group S occupancy as provided in this section

Group S:

NFPA 13	S-1. Moderate hazard storage occupancies including building or portions of buildings used for storage of combustible materials not classified as Group S, Division 2, or group H occupancies but not be limited to: See IFC occupancy classification definition Group S-1.	6,000 s.f.
NFPA 13	A group S-1 occupancy used for the storage of commercial trucks or buses.	5,000 s.f.
NFPA 13	A group S-1 occupancy used for the storage of Upholstered furniture or mattresses.	2,500 s.f.
NFPA 13	A group S-1 occupancy used for the bulk storage of distilled spirits or wine.	0 s.f.
NFPA 13	Repair garages/service stations	3,500 s.f.
	Buildings with repair garages servicing vehicles parked in basements.	0 s.f.
	Buildings used for the repair of commercial trucks or buses.	5,000 s.f.
NFPA 13	Bulk storage of tires	20,000 cubic feet
NFPA 13	S-2. Low-hazard storage occupancies, including buildings or portions of buildings used for storage of noncombustible materials, but not be limited to: See IFC occupancy classification Definition Group S-2.	15,000 s.f.
	Buildings or portions of buildings classified as enclosed parking garages in accordance with section 406.6 of the IBC 2018 or where located beneath other groups.	0 s.f.
	Exceptions: (1) Enclosed parking garages located beneath group R-3 occupancies; (2) Parking garages defined in section 406.6 of the IBC 2018 as open parking	

garages.

Amend section 903.2.11 Group U to read as follows:

Group U: Private garages, carports, sheds, and

agricultural buildings.

n/a

Amend section 903.2.11.1.3 Basements. Where any portion of a basement is located more than 75 feet from openings required by section 903.2.11.1, the basement shall be equipped throughout with an approved automatic sprinkler system.

Amend section 903.3.1.2.1 Group R Balconies and Decks. Sprinkler protection shall be provided for all exterior balconies, decks, and ground floor patios of dwelling units where the building is required to have a fire sprinkler system installed. Sidewall sprinklers that are used to protect such areas shall be permitted to be located such that their deflectors are within 1 inch to 6 inches below the structural members and a maximum distance of 14 inches below the deck of the exterior balconies and decks.

Add section 903.3.1.2.4 Fire Sprinklers for Canopies. A canopy covering a door that is required to be marked as an exit shall be required to have fire sprinklers installed outside that door if the canopy extends more than 4 feet out from the door and is 12 feet or less in height from the ground regardless of whether the canopy is combustible or non-combustible. Canopies that have vehicle access under them with door openings shall be required to have fire sprinklers installed under the total canopy regardless of whether the canopy is combustible or non-combustible.

Exception: If the Code does not require a building to have a fire sprinkler system, section 903.3.1.2.3 does not apply.

Amend section 903.3.1.3 NFPA 13D sprinkler systems. Automatic sprinkler systems installed in one and two family dwellings, Group R-3 and R-4 congregate living facilities and townhouses shall be permitted to be installed throughout in accordance with NFPA 13D, unless the system demands cannot be met.

Amend section 903.3.7 Fire Department Connections. The location of fire department connections shall be approved by the Fire Code Official.

Amend section 903.4.2 Alarms. A minimum of 110 candela weather proof strobe light suitable for cold weather use with a minimum of 75 candelas at -30 degrees shall be tied into the building fire alarm system and mounted directly above the fire department connection between 7 feet and 10 feet in height from the ground or as approved by the Fire Code Official. This strobe shall flash on all fire alarm and fire sprinkler activations with the exception of trouble and supervisory alarms.

ALTERNATIVE AUTOMATIC FIRE-EXTINGUISHING SYSTEMS

Add section 904.13.2.1 Ventilation Operation. The ventilation system shall shut down the make up air to the hood and continue to exhaust upon activation of the hood fire extinguishing

system. Supply air openings other than part of the hood system shall be a minimum of 6 feet from any part of a Type 1 Hood. Supply air openings closer than 6 feet must shut down upon activation of the extinguishing system.

STANDPIPE SYSTEMS

Amend section 905.3.9 Building Footprint and Access. Additional standpipe systems for new buildings or structures may be required to be added as deemed necessary by the Fire Code Official. When standpipes are located in stairwells, the hose valve connections shall be on the floor landings not intermediate landings.

PORTABLE FIRE EXTINGUISHERS

Delete section 906.1 Exceptions.

Amend table 906.3 (1) Fire Extinguishers for Class A Fire Hazards to read as follows: Portable fire extinguishers for fire protection in low and moderate hazard occupancies shall be a 5lb. ABC in buildings that are covered throughout with a fire sprinkler system. If there is no fire sprinkler system in a low or moderate hazard occupancy, a 10lb. ABC fire extinguisher shall be installed. Spacing is based on a 75-foot travel distance to the fire extinguisher. Portable fire extinguishers for fire protection in high hazard occupancies shall be 10lb. ABC in buildings that are covered throughout with a fire sprinkler system. If there is no fire sprinkler system in a high hazard occupancy, a 20lb. ABC fire extinguisher shall be installed. Spacing is based on a 50-foot travel distance to the fire extinguisher.

FIRE ALARM AND DETECTION SYSTEMS

Add section 907.1.4 Fire Alarm Control Panels. Each building shall have no more than 1 Fire Alarm Control Panel (FACP).

Installation of the fire alarm panel shall not exceed six (6) feet in height measured from the floor to the top of the panel.

Exception 1: Panel height may be altered by the Fire Code Official.

Exception 2: Suppression system releasing panels are not required to meet the limitation in the number of panels.

Amend section 907.2. Pursuant to the approved recommendations of the Central Iowa Code Consortium, the following exception is being utilized in this code: Prior to July 1, 2016, any jurisdiction calculating fire areas by other methods not defined by the International Fire Code or International Building Code, may continue to utilize those methods in calculating fire sprinkler square footage requirements as previously established by local jurisdiction.

Where Required General to read as follows: An approved addressable fire alarm system

complying with the provisions of this Code and NFPA 72 shall be installed when the gross square footage of a building is equal to or greater than the area as specified in sections 903.2.1 through 903.2.11 inclusive, subject to the authority having jurisdiction or by section 907.2, whichever shall be more restrictive.

Exception:

- 1. Buildings with 8 or less initiating devices may use zoned systems provided only one device is used per zone. Each device shall have a plain English LCD (liquid crystal display). This alpha/numeric descriptor location is required to be reported to the WestCom dispatch center upon activation of the fire alarm system.
- 2. R-3 dwellings are not required to meet section 907.2 of this Code.
- 3. Townhouses are required to be monitored only if a single fire sprinkler system is used for multiple units.

Add section 907.2 (a). Manual Fire Alarm Pull Boxes. Manual fire alarm pull boxes ("pull stations") shall be required where deemed necessary by the Fire Code Official.

Add section 907.2 (b). Monitoring. All fire alarm systems shall be monitored by a UL listed monitoring station.

Add section 907.2 (c). Location. Each address point identification shall have an alpha/numeric descriptor location for the fire alarm system. This alpha/numeric descriptor location is required to be reported to the West Des Moines Fire Department dispatch center upon activation of the fire alarm system.

Add section 907.2 (d). Where required: Where corridors and/or hallways are designed as the path of egress, and at the top of stairwells that serve more than two floors and are protected by fire sprinkler systems, they shall also be protected by smoke detection. Smoke detection shall be of the photo electric type or as approved by the Fire Code Official.

Delete sections 907.2.8, 907.2.8.1 (Exceptions), 907.2.9, 907.2.9.1 (Exceptions), 907.2.9.3 (Exceptions)

Add section 907.2.8 Group R General. Group R-1; Group R-2 apartment houses, condominiums and boarding houses (non-transient) convents, dormitories, fraternities, sororities, and monasteries; and Group R-4 shall have a monitored addressable fire alarm system. Upon adoption of this Fire Code, Group R-1; Group R-2 apartment houses, condominiums and boarding houses (non-transient) convents, dormitories, fraternities, sororities, and monasteries that have existing automatic fire alarm systems shall comply when their existing fire alarm system needs replacement to have that fire alarm system monitored.

Amend section 907.2.11 Single and Multi-station Smoke Alarms. Listed single and multiple-station smoke alarms complying with UL 217 shall be installed in accordance with provisions of this Code and the household fire warning equipment provision of NFPA 72. Smoke alarms in dwelling units shall be addressable with sounder bases and monitored by the building fire alarm system as a supervisory signal only. Mini horns in dwelling units are not required if notification

from a building fire alarm system is through the smoke alarms with sounder bases.

Note: Section 907.2.11 only applies to R-1, R-2, R-4 and I-1. Delete the exceptions for 907.6.3

Amend section 907.6.4. Zones. Each floor shall be zoned separately and zone shall not exceed 22,500 square feet. The length of any zone shall not exceed 300 feet in any direction. Fire alarm panels shall have all zones and address points plainly and permanently labeled as to their location on the outside of the panel or on an easily readable map of the building, if no display screen is present. A zoning indicator panel and the associated controls shall be provided in an approved location. The visual indication shall lock in until the system is reset.

Delete section 907.6.4.1

Amend section 907.6.6 Monitoring to read as follows: When required by this chapter, the International Building Code, or the Fire Code Official, an approved UL 827 listed remote central station ,in accordance with NFPA 72, shall monitor fire alarm systems to provide for the immediate and automatic notification of the Fire Department.

Exception: Automatic sprinkler and fire alarm systems in 1 and 2-family dwellings.

Amend section 910.2.1 Group F-1 or S-1. Smoke and heat vents installed in accordance with section 910.3 or a mechanical smoke removal system installed in accordance with section 910.4 shall be installed in buildings and portions thereof used as a Group F-1 or S-1 occupancy having more than 30,000 square feet of undivided area. In occupied portions of a building equipped throughout with an automatic sprinkler system in accordance with 903.3.1.1, where the upper surface of the story is not a roof assembly, a mechanical smoke removal system in accordance with section 910.4 shall be installed. Exception: Group S-1 aircraft repair hangars.

FIRE DEPARTMENT CONNECTIONS

Add section 912.1.1 Fire Department Connection Height. The fire department connection shall be located not less than 18 inches from the bottom of the cap(s) and not more than 3 feet from the top of the cap(s) above the level of the adjacent grade or access level. Deviation from this height may be granted by the Fire Code Official for just cause.

Amend section 912.4 Access. Immediate access to the fire department connection shall be maintained at all times and without obstruction by fences, bushes, trees, walls, or any other objects within a minimum distance of 5-feet on each side of the connection to include in front of the connection and above the connection.

Delete section 912.4.2

MEANS OF EGRESS ILLUMINATION

Amend section 1008.3.1 General

In the event of the power supply failure in rooms and spaces that require two or more means of egress or are 400 square feet or greater, an emergency electrical system shall automatically illuminate all of the following areas as approved by the Fire Code Official:

- 1. Aisles
- 2. Corridors
- 3. Exit access stairways and ramps.

Amend section 1008.3.2 Buildings

In the event of the power supply failure in rooms and spaces that require two or more means of egress or are 400 square feet or greater, an emergency electrical system shall automatically illuminate all of the following areas:

- 1. Interior exit access stairways and ramps
- 2. Interior and exterior exit stairways and ramps
- 3. Exit passageways
- 4. Vestibules and areas of the level of exit discharge used for exit discharge in accordance with section 1028.1.
- 5. Exterior landings as required by section 1010.1.6 for exit doorways that lead directly to the exit discharge.

Amend section 1008.3.3 Rooms and Spaces.

In the event of a 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. Generator rooms
- 5. Public restrooms that contain more than one water closet/urinal or that are accessible
- 6. Meeting/conference rooms with an area 400 square feet or greater
- 7. Classrooms in an E occupancy with an area 400 square feet or greater

Add to section 1009.2 Continuity and Components item #11

#11. Components of exterior walking surfaces shall be concrete, asphalt, or other approved hard surface.

Add section 1010.1.5.1 Landings at Doors

For landings required by section 1010.1.4 to be at the same elevation on each side of the door, exterior landings at doors shall be provided with frost protection per section 1809.5.1.

Add the following language to section 1010.2.2 Hardware

Door handles, pulls, latches, locks and other operating devices on doors required to be accessible by Chapter 11 of the International Building Code, shall not require tight grasping, tight pinching or twisting of the wrist to operate. This includes thumb turn locks.

Add section 1010.2.2.1 Door Closers.

Where rated doors are required for the protection of fire and/or smoke corridors or compartments, the following shall apply:

- 1. Doors shall be installed with automatic door closers
- 2. Door closers shall be UL listed for fire doors and of hydraulic type
- 3. Spring type hinged door closers are not allowed
- 4. Commercial grade ball bearing hinges are allowed

Add section 1013.1.1 Additional Exit Signs.

Exit signs may be required at the discretion of the Fire Code Official to clarify an exit or exit access.

Amend section 1013.3 Exit Sign Illumination.

Exit signs shall use an LED lighting system and be illuminated internally. Exit signs are required to have battery backup unless an onsite generator is used. Luminance on the face of an exit sign shall have an intensity of not less than 5.0 foot candles (53.82 lux).

Add section 1013.3.1 Combination Lights.

Combination exit sign/emergency light devices shall not be allowed.

Add section 1013.3.2 Separation of Emergency Lighting.

Emergency lighting shall be separated from the exit sign by a minimum of 6 feet. This distance may be reduced by the Fire Code Official for just cause.

Add section 1013.3.3 Self- luminous Exit Signs.

Self-luminous exit signs installed after July 1, 2004, are not allowed throughout the entire City of West Des Moines.

Exceptions:

1. Approved self-luminous exit signs may be allowed in tents by the Fire Code Official.

2. Tactile Exit signs required by section 1013.4 need not be provided with illumination.

Delete sections 1013.5, 1013.6, 1013.6.1, 1013.6.2 and 1013.6.3

Add section 1031.5.3 Window Well Drainage

All window wells shall be provided with approved drainage.

EMERGENCY AND STANDBY POWER SYSTEMS

Amend section 1203.1.6 Uninterruptable power source. An uninterrupted source of power shall be provided for equipment where required by the manufacturer's instructions, the listing, this code or applicable referenced standards. Motion sensors, or similar devices, shall not be allowed to be installed on or control lights, light fixtures or lighting systems that are designated as emergency power.

Add section 1203.1.10 Shutdown of Emergency and Standby Power Systems. In addition to the requirements of NFPA 110 for a remote manual stop, an approved keyed switch to shut down the generator shall be located at the remote annunciator panel or fire panel. The Fire Code Official shall determine its location. If there is no annunciator or fire alarm panel or the location of these panels is determined to be inadequate for this shut down button, the Fire Code Official shall determine its location.

Add section 1203.1.11 Emergency Generator Signs. Main electrical disconnects and main breaker panels supplied by the generator shall be provided with approved signs. Additionally, doors accessing emergency and standby power systems shall be provided with approved signs. When approved switches for emergency power shutdown are located remote from the fire alarm annunciator, an approved sign shall be provided at the fire alarm annunciator. Approved signs shall contain the word CAUTION in black letters at least 2 inches (50 mm) high on a yellow background. Such warning signs shall be placed so as to be readily discernible.

Chapter 32 High Piled Combustible Storage

Amend and add the following into this chapter.

SECTION 3202 DEFINITIONS

3202.1 Definitions.

The following term is defined in Chapter 2:

SPECULATIVE BUILDING. A Group S, F or M occupancy having an interior clear height greater than 12 feet (3657 mm) where high-piled storage may accrue and the client leasing or the occupant owner does not know the commodity that will be stored or the method of storage.

3206.2.1 Speculative building. Group S, F and M speculative buildings that have an interior clear height greater than 12 feet where high piled storage may accrue shall comply with this chapter.

3206.4.2 Sprinkler design.

3206.4.2.1 General.

The design of *automatic sprinkler systems* for the protection of Group M and S occupancies containing high-piled storage or high-challenge commodities over an area equal to or greater than 2,500 ft.² (232 m2) and designed for the protection of hazardous materials stored more than one pallet high in Group M, S or H occupancies, shall be in accordance with this section. This section does not apply to miscellaneous storage within the scope of NFPA 13.

3206.4.2.2 Requirements for all plan submittals.

See section 903.1.9. and 3201.3 for plan submittal requirements.

3206.4.2.3 Minimum design requirements for speculative warehouses.

The design of the *automatic sprinkler system* for speculative warehouses shall be based on storage of a cartoned Class A nonexpanded plastic to the available storage height. The storage height shall be determined by subtracting 48 inches (from the highest point of the roof above each system for ESFR and 30 inches for area density applications.

3206.4.2.4 Minimum requirements for client leased or occupant-owned warehouses.

The design of an automatic sprinkler system for client leased or occupant owned buildings containing high piled storage shall be based on the requirements of NFPA 13. The responsible Fire Protection Contractor shall perform a survey of the building to determine commodity classification, storage configuration, building height and other information related to the development of an appropriate sprinkler system design. The Contractor shall also make reasonable efforts to meet with the building owner or operator to understand seasonal or customer related fluctuations to the stored commodities, storage height, and configuration.

The sprinkler design shall be based on the most demanding requirements determined through the on-site survey and discussions with the building owner or operator. Technical Report shall clearly define the basis for determining the commodity and sprinkler design selection, along with how the commodities will be isolated or separated, and the referenced design document(s), including NFPA 13 or the current applicable Factory Mutual Data Sheets. If a specific fire test is used as the basis of design, a copy of the fire test report shall be provided at the time of plan review.

3206.4.2.5 Required information at plan submittal.

All plans, hydraulic calculations and technical reports shall be submitted with the plan submittal form. The individual submitting the design package shall ensure that all of the required information requested on the plan submittal form is included.

3206.4.2.6 Minimum plan information requirements.

In addition to the requirements of NFPA 13, the following information shall be included in the plans or technical report.

3206.4.2.6.1 Class I-IV and Group A plastic commodities.

- 1. An owner's certificate in accordance with NFPA 13. The design criteria, e.g., NFPA 13, Factory Mutual Data Sheet, or a specific fire test report.
- 2. A Water Supply Flow & Pressure Test Report performed within 90 days of the plan submittal
- 3. The type of design, e.g., Control Mode Density/Design Area Method; Specific Application Control Mode Method; Suppression Mode Method, including appropriate code references.
- 4. A description of the stored commodities and how the commodity classification was determined.
- 5. A layout of the proposed storage arrangement. If the storage is in racks, a plan and elevation detail illustrating rack heights, flue dimensions and arrangement. This detail is not required for speculation warehouses.
- 6. The aisle dimensions between each storage array.
- 7. If a high challenge commodity is separated using fire-resistive construction, the boundary of the fire-resistive construction shall be illustrated.
- 8. A data sheet for the backflow preventer. If a data sheet is not available, the design professional shall include a statement addressing the minimum required pressure loss.
- 9. A data sheet for each installed automatic sprinkler.
- 10. A data sheet for each pipe hanger used to hang or support the sprinkler piping.
- 11. If a fire pump will be installed or used, the manufacturer's factory test curve shall be included in the submittal.
- 12. A cross-section view illustrating obstructions to the ceiling sprinklers, e.g., lights, structural members, cable trays, electrical bus ducts and HVAC ductwork.

3206.4.2.6.2 Hazardous materials.

In addition to the requirements of this section, the following information shall be included in a hazardous materials technical report.

- 1. A hazardous materials inventory statement
- 2. For flammable & combustible liquids, an analysis of the miscibility of Class I liquids, the size and type of the packaging, the packaging materials of construction, and if the containers have a pressure relieving mechanism.
- 3. For Level 2 or 3 aerosols, a statement indicating that the aerosols are cartoned or uncartoned.

3206.4.2.7 Identification of sprinkler system capabilities and limitations.

A label shall be permanently installed at or adjacent to each sprinkler riser. When a building contains more than four risers, the sign shall be located at an approved location inside the building. The minimum sign dimension is 6-inches (152 mm) high by 4-inches (101 mm) wide. The sign shall specify the capabilities and limitations of the *automatic sprinkler system*. The sign shall include the following information:

- 1. The design base or basis, including the edition used
- 2. A statement indicating if the sprinkler design is control mode density area method, control mode specific application, suppression mode, or any combination thereof.
- 3. When used, all of the storage conditions stipulated NFPA 13 for Special Designs.
- 4. The maximum storage height
- 5. The minimum required aisle width
- 6. If storage is in racks, the maximum rack width and minimum transverse and longitudinal flue widths.
- 7. Storage Capabilities: Commodities designed to be protected by the automatic sprinkler system
- 8. Limits on storage heights of idle wood and plastic storage
- 9. Limits on storage heights of miscellaneous Group A plastic, tire and rolled paper storage
- 10. Locations where in-rack sprinklers are required
- 11. Locations where horizontal and/or vertical barriers are required
- 12. Information explaining the manufacturer, sprinkler identification number, k-factor, and operating temperature of the overhead sprinklers protecting the high-piled storage.
- 13. Fire Protection Contractor contact information

The following example illustrates a suggested label or sign:

Automatic Sprinkler Capabilities & Limitations Stored Commodity Design Documents Design Type Max. Storage Height Min. Aisle Width Max. Rack Width Flue Dimensions System Capabilities	System	Class I water miscible flammable liquids in 1 & 5 gallon polyethylene containers in fiberboard cartons NFPA 13, 2013 edition & NFPA 30 Control Mode, Density/Area Method 25 feet 8 feet 9 feet Longitudinal: Min. 6 inches Transverse: Min. 3 inches Class I-IV commodities, stored
Idle Pallets Tire Storage Rolled Paper Storage		commodity, solid pile or palletized Group A plastics to 12 feet; rack storage of Group A plastics to 25 feet. 6 feet maximum storage height 5 feet maximum storage height 5 feet maximum storage height
In-rack sprinklers		In-rack sprinklers are required at each

of 3 rack tiers containing the stored commodity. In-rack sprinklers are Tyco/Central FS-B, 17/32" orifice, QR

155°F element, SIN TY0041

Required at each rack tier containing

the stored commodity.

Tyco ELO-231B, 3/4" orifice, SR 286°F

element, upright, SIN TY0030

ABC Sprinkler Co. Designer: John

Smith

FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION

Horizontal Barriers

Ceiling Sprinkler

FP Contractor

Amend section 3301.2 Purpose. This chapter prescribes minimum safeguards for construction, alteration, and demolition operations to provide reasonable safety to life and property from fire and emergencies during such operations.

Add section 3310.1.1 Construction Site Access. Approved fire apparatus access roads shall be provided for every facility, building or portion of a building as soon as construction commences. The fire apparatus access road shall comply with the requirements of section 503.2 and this section and shall extend to within 100 feet of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility.

Exception: The Fire Code Official is authorized to increase the dimension of 100 feet where:

- The building is equipped throughout with an approved automatic sprinkler 1. system that is fully functional and installed in accordance with section 903.1.1, 903.3.1.2 or 903.3.1.3.
- Fire apparatus access roads cannot be installed because of location on property, 2. topography, waterways, nonnegotiable grades or other similar conditions, and an approved alternative means of fire protection is provided.

Amend 3312.1 Stairways required. Where building construction exceeds 30 feet in height above the lowest level of fire department vehicle access, two temporary or permanent stairways shall be provided. As construction progresses, such stairways shall be extended to within one floor of the highest point of construction having secured decking or flooring.

Amend 3314.1 Where required. In buildings required to have standpipes by section 905.3.1, not less than one standpipe shall be provided for use during construction. Such Standpipe shall be installed prior to construction exceeding 30-feet in height above the lowest level of fire department vehicle access. Such standpipe shall be provided with fire department hose connections at approved locations complying with section 3312.1. As construction progresses, such standpipes shall be extended to within one floor of the highest of construction having secured decking or flooring.

Add Chapter 41 Special Events

SECTION 4101

GENERAL

- **4101.1 Scope.** Special events including trade shows and exhibitions, outdoor assembly events, outdoors mazes, special amusement buildings, and special scaffolding structures shall comply with this chapter and section 1028. Temporary indoor vehicle displays and vehicle competition or demonstrations shall comply with this chapter and section 314.
- **4101.2 Site plans.** A detailed site plan shall be submitted to the Fire Code Official with each permit application for approval.
- **1. Outdoor events:** The permit application and site plan shall be submitted a minimum of 30 business days prior to the event. Site plans shall include, but not be limited to:
 - 1. The means of egress.
 - 2. Location and width of exits and aisles.
 - 3. Location of exit signs.
 - 4. Location of fencing or means used to confine attendees.
 - 5. Total square footage of enclosed space.
 - 6. Location and arrangement of all tents, booths or cooking equipment.
 - 7. Locations of fire apparatus access roads.
 - 8. Location of fire protection equipment.
 - 9. Type and location of heating and electrical equipment where applicable.
 - 10. Location of temporary staffed water stations and permanent water fountains.
- **2. Trade shows and exhibitions:** The permit application and site plan shall be submitted a minimum of 30 business days prior to the event. Site plans shall include, but not be limited to:
 - 1. The means of egress.
 - 2. Location and width of exits and aisles.
 - 3. Location of exit signs.
 - 4. Total square footage of space.
 - 5. Location and arrangement of all booths and cooking equipment.
 - 6. Location of all fire protection equipment.
 - 7. Type and location of heating and electrical equipment where applicable.
 - 8. Location of covered or multi-level exhibits or booths.
- **3. Mazes.** The permit application and site plan shall be submitted a minimum of 30 business days prior to the event. Site plans shall include, but not be limited to:
 - 1. Means of egress.

- 2. Location and width of exits and aisles.
- 3. Location of exit signs.
- 4. Total square footage of space.
- 5. Location and arrangement of all booths and cooking equipment.
- 6. Location of all fire protection equipment.
- 7. Location of means to confine attendees.
- 8. Locations of fire apparatus access roads.
- 9. Type and location of heating and electrical equipment where applicable.
- 10. Locations of structures.

At time of permit application, the event coordinator shall submit a letter from the property owner authorizing the use of the site, the address of the site, dates and hours of operation and names and 24-hour phone numbers of at least two principals.

- **4. Temporary indoor vehicle displays:** The permit application and site plan shall be submitted a minimum of 10 business days prior to the display of electric, liquid- or gas-fueled vehicles, boats or other motor craft. Floor plans shall include, but not be limited to:
 - 1. The means of egress.
 - 2. Location and width of exits and aisles.
 - 3. Location of exit signs.
 - 4. Total square footage of space.
 - 5. Location and arrangement of all booths and cooking equipment.
 - 6. Location of all fire protection equipment.
 - 7. Type and location of heating and electrical equipment where applicable.
 - 8. Location and size of exhibits and booths.
 - 9. Location of structures.

Exception: Auto dealerships.

- **5. Vehicle competition or demonstration.** The permit application and site plan shall be submitted a minimum of 10 business days prior to the competition or demonstration of electric, liquid- or gas-fueled vehicles, boats or other motor craft. A floor plan shall include, but not be limited to:
 - 1. The means of egress.
 - 2. Location and width of exits and aisles.
 - 3. Location of exit signs.
 - 4. Total square footage of space.
 - 5. Location and arrangement of all booths and cooking equipment.
 - 6. Location of all fire protection equipment.
 - 7. Type and location of heating and electrical equipment where applicable.
 - 8. Location and size of exhibits and booths.
 - 9. Location of structures.
 - 10. Location of fire apparatus access roads where applicable.

SECTION 4102

DEFINITIONS

4102.1 Definitions. The following words and terms are defined in Chapter 2.

CROSS AISLES.
EXHIBITS.
FLAME EFFECT.
MAIN AISLE.
MAZE.
OUTDOOR ASSEMBLY EVENT.
TEMPORARY STRUCTURES.
TRADE SHOWS OR EXHIBITIONS.

4103 General Requirements

- **4103.1** Access for firefighting and medical services. Approved vehicle access for fire fighting and medical services shall be provided in accordance with sections 503 and 512.
- **4103.2 Combustible storage.** Combustible materials stored at special events shall be stored in approved locations and containers.
- 4103.3 Crowd managers. Crowd managers shall be provided where the Fire Code Official determines that an indoor or outdoor gathering warrants crowd control. Crowd managers shall be in accordance with section 403.3.
- 4103.4 Decorative materials and furnishings. Curtains, drapes and decorations including, but is not limited to drapes, signs, banners, acoustical materials, cotton, hay, fabric, paper, straw, moss, split bamboo, and wood chips shall be flame resistant as demonstrated by testing in accordance with NFPA 701, or provide documentation of flame retardancy. Field flame test shall be in accordance with section 320. Materials that cannot be treated for flame retardancy shall not be used unless approved by the Fire Code Official. This includes but is not limited to oilcloth, tarpaper, nylon, plastic cloth, and other plastic materials.
- 4103.5 Fire protection equipment clearance. Clearance around all fire protection equipment shall be in accordance with section 901.4.6.
- **4103.6 Fire extinguishers.** Fire extinguishers shall be in accordance with section 906 and NFPA 10
- 4103.7 Fire watch. Fire watch shall be in accordance with section 403.12.1.
- 4103.8 Fireworks, pyrotechnics. Fireworks and pyrotechnics shall comply with Chapter 56.

- **4103.9 Housekeeping.** The special event area and related areas shall be kept free from combustible debris at all times.
- **4103.10 LP-gas heaters.** Fuel supplies for liquefied-petroleum gas-fired heaters shall comply with Chapter 61 of the International Fire Code.
- 4103.11 Open flame devices. Open flame devices shall comply with section 308.
- 4103.12 Waste disposal. Combustible debris shall not be accumulated at special events. Combustible debris, rubbish and waste material shall be removed from special events at the end of each shift of work. Combustible debris, rubbish and waste material shall not be disposed of by burning on the site unless approved.

SECTION 4104

TRADE SHOWS AND EXHIBITIONS

- **4104.1 General.** Trade shows and exhibitions conducted within any occupancy shall comply with Chapter 38.
- 4104.2 Vehicles. Liquid- and gas-fueled and electric vehicles, boats or other motor-craft and equipment used for display, competition or demonstration within a building shall be in accordance with section 314.
- **4104.3 Means of egress.** *Means of egress* shall comply with this section and the requirements of Chapter 10.
- **4104.3.1 Travel distance.** The maximum travel distance from any point in an exhibit to an exit access aisle shall not exceed 50 feet (15240mm).

4104.3.2 Aisles.

4104.3.2.1 Aisle width. Minimum aisle width inside a trade show or exhibition shall comply with the following:

Square Footage of Trade Show or Exhibition Minimum Aisle Width

Greater than 15,000 square feet (1393m2) 10 feet (3048mm) 5,000 square feet (465 square meters) to 15,000 square feet (1393m2) 8 feet (2438mm) Less than 5,000 square feet (465 m2) 6 feet (1829mm)

- **4104.3.3 Obstructions.** Aisles shall be kept clear of all obstructions, including but not limited to, fixtures and displays of goods for sale, chairs, tables, product, displays, vehicles, and trailer tongues.
- 4104.3.4 Exit signs. Exit signs shall be visible from all locations in the occupancy.

4104.4 Exhibit construction and materials. The materials used for an exhibit shall comply with section 3804.4 and Chapter 8

4104.4.1 Materials. Shall be one of the following:

- 1. Noncombustible or limited-combustible materials.
- 2. Wood that is greater than ¼-inch (6mm) nominal thickness
- 3. Wood ¼-inch (6mm) nominal thickness or less that is pressure-treated fireretardant wood meeting the requirements of NFPA 703, Standard for Fire Retardant Impregnated Wood and Fire Retardant Coatings for Building Materials. The product shall be marked or labeled by the manufacturer. The product shall not be painted or similarly modified until the material has been inspected and the marking or labeling verified, or provide documentation acceptable to the Fire Code Official.
- 4104.4.1.1 Flame retardant materials. Materials shall comply with Chapter 8.
- 4104.4.1.2 Wall and ceiling coverings. Textile wall coverings, such as carpeting and similar products used as wall or ceiling finishes shall comply with Chapter 8.
- **4104.4.1.3 Plastics.** Plastics shall be limited to those that comply with Chapter 8. Plastics used in trade shows and exhibitions with an occupant load of 300 or more shall be Class A or Class B. Plastics used in trade shows and exhibitions with an occupant load of less than 300, shall be Class A, Class B or Class C.

4104.5 Combustible materials storage.

- 4104.5.1 Quantity. Combustible materials shall be limited to a one-day supply
- **4104.5.2 Location.** Storage of combustible materials behind exhibits, booths, or tents is prohibited. Combustible materials, including but not limited to wood crates, paper and cardboard boxes, shall be stored outside the building in an approved area or in a storeroom having a fire-resistance rating of at least one hour and protected by an approved automatic fire-extinguishing system

4104.6 Covered exhibits and booths.

4104.6.1 Fire Protection.

- **4104.6.1.1 Automatic sprinkler systems.** An approved sprinkler system shall be provided in covered exhibits and booths exceeding 300 square feet (2787 m2). Each level of multi-level exhibit booths shall be protected throughout, including the uppermost level where the uppermost level is covered with a ceiling.
- 4104.7 Multi-level booths. Construction documents for all multi-level exhibits shall be approved and stamped by a licensed structural engineer or architect and shall be submitted with

the permit application. This includes any exhibit where a live load is proposed above the exhibit area floor level, regardless of the accessibility of the area to the public. Upper levels of multilevel booths with an occupant load greater than 10 persons shall have at least 2 remote exits.

4104.8 Hazardous Materials. Hazardous materials shall comply with this section and Chapters 50 through 67.

4104.8.1 Specific prohibitions. The following hazardous materials shall not be stored, handled or used in trade shows and exhibitions:

- 1. Division 1.1, 1.2, 1.3, and 1.5 explosives as classified by the U.S. Department of Transportation.
- 2. Detonable, Class I and Class II organic peroxides.
- 3. Class I-A flammable liquids.
- 4. Class 4 and Class 3 oxidizers.
- 5. Class 4 and Class 3 (unstable) reactive materials.
- 6. Class 3 water-reactive materials.
- 7. Pyrophoric materials.
- 8. Highly toxic materials
- 9. Toxic gases.
- 10. Fueling or defueling of flammable or combustible that are stored or used as liquids, cryogenics or compressed gases.

4104.9 Demonstration cooking and warming equipment or devices.

4104.9.1 General. Cooking and warming devices for demonstration purposes only shall be in accordance with section 3804.9.

4104.9.2 Public Isolation. Equipment and devices shall be isolated from the public by not less than 4 feet (1219 mm) or by a noncombustible 3-sided barrier between the equipment and devices and the public.

4104.9.3 Protection. Single-well cooking equipment using combustible oils or solids shall meet the following:

- 1. A noncombustible lid shall be immediately available. The lid shall be of sufficient size to cover the cooking well completely.
- 2. The cooking surface shall not exceed 288 square inches (1858 cm2).
- 3. The equipment shall be placed on a noncombustible surface.
- 4. The equipment shall be separated from each other by a horizontal distance of not less than 2 feet (609mm).

4104.9.4 Cooking equipment shall be separated from combustible materials by a horizontal distance of at least 2 feet (609mm).

4104.9.5 Butane. Butane for cooking equipment shall be limited to one 10 oz cylinder and one spare in storage, of the same size, per appliance. Storage location shall be approved by the Fire Code Official.

4104.9.5.1 Portable butane-fueled appliances. Portable butane-fueled appliances are allowed in restaurants and in attended commercial food catering operations where fueled by not more than two 10 oz (284gL) LP-gas capacity, nonrefillable butane containers that have a water capacity not exceeding 1.08 lb (0.5 kg) per container. The containers shall be directly connected to the appliance, and manifolding of containers is not permitted. Storage of cylinders is limited to 24 containers, with an additional 24 permitted where protected by a 2-hour fire-resistance—rated barrier.

SECTION 4105

OUTDOOR ASSEMBLY EVENTS

4105.1 General. Outdoor assembly events shall be in accordance with this section 3805 and Chapter 10.

4105.2 Occupant load. The Fire Code Official shall establish an occupant load for the event site.

4105.3 Exits. Exits shall comply with Chapter 10 and be as remote from each other as practical and shall be provided as follows:

Occupant Load Minimum Number of Exits

1 to 500 2 exits 501 to 1,000 3 exits 1,001 or 1,500 4 exits

each additional 500 persons 36 additional inches of exit width

4105.3.1 Width. The aggregate clear width of exits shall be a minimum of 36 inches wide (914mm) for each 500 persons to be accommodated.

4105.3.2 Signs. Exits shall be identified with signs that read "EXIT". The signs shall be weather-resistant with lettering on a contrasting background. The lettering shall be of sufficient height and brush stroke to be immediately visible from 75 feet (22,860mm). Placement of the exit signs shall be approved by the Fire Code Official.

4105.4 Concession stands, food booths, and retail booths.

4105.4.1 General. Concession stands, food booths and retail booths shall be in accordance with section 3805.4.

4105.4.1.1 Distances. A minimum of 20 feet (6096mm) shall be provided between every 150 linear feet (45,720mm) of booth space. A minimum of 30 feet (9144mm) shall be provided between booths used for cooking and the vehicles, generators, or any other internal combustion engines. A minimum of 30 feet (9144 mm) shall be provided between booths used for cooking and amusement rides or devices.

4105.4.2 Cooking appliances or devices.

- **4105.4.2.1 Public isolation.** Cooking appliances or devices shall be isolated from the public by not less than 4 feet (1219 mm) or by a non-combustible 3-sided barrier between the equipment and devices and the public.
- **4105.4.2.2 Protection.** Single-well cooking equipment using combustible oils or solids shall meet the following:
 - 1. A noncombustible lid shall be immediately available. The lid shall be of sufficient size to cover the cooking well completely.
 - 2. The cooking surface shall not exceed 288 square inches (18,580mm).
 - 3. The equipment shall be placed on a noncombustible surface.
 - 4. The equipment shall be separated from each other by a horizontal distance of not less than 2 feet (609mm).
- 4105.4.2.3 Liquefied petroleum gas (LP-gas). LP-gas shall be in accordance with Chapter 61 and NFPA 58.
- **4105.4.2.3.1 Maximum number and quantity.** A maximum of a total aggregate water capacity of 50 gallons (95L) of LP-gas is permitted at one concession stand or booth used for cooking.
- 4105.4.2.3.2 LP-gas high-pressure cylinder hoses. Hoses shall be designed for a working pressure of 350 PSIG (2413 kPa) with a safety factor of 5 to 1 and shall be continuously marked with LP-GAS, PROPANE, 350 PSI(2413 kPa) WORKING PRESSURE, and the manufacturer's name or trademark. Hose assemblies, after the application of couplings, shall have a design capability of 700 PSIG (4826 kPa). Hose shall not exceed 12 feet (3638 mm) unless approved by the Fire Code Official.
- **4105.4.2.3.3** LP-gas low-pressure cylinder hoses. Hoses with a working pressure of 5 psig shall be allowed when a fix regulator is set a 5 psi and is connected directly to the LP GAS cylinder. The hose shall not exceed 12 feet (3658 mm) unless approved by the Fire Code Official.
- 4105.4.4 Generators / electrical. The generators shall be installed at least 10 feet (3048mm) from combustible materials, and shall be isolated from the public by physical guard, fence, or enclosure installed at least 3 feet (914mm) away from the internal combustion power source, and be provided with a compliant portable fire extinguisher per section 906 and NFPA 10.
- 4105.4.5 Temporary water stations. When outdoor temperatures are expected to exceed 90oF (35oC), the event sponsor shall provide and maintain a minimum of one staffed water station for

each 1,000-projected attendance. The water station shall include adequate water supply, cups, and a means for rapid replenishing of exhausted water. Each water station shall be located as far apart as practicable to allow ease of access for event attendees.

SECTION 4106

MOBILE FOOD VEHICLES

4106.1 General. Mobile food vehicles which are temporarily or permanently stored on a property where food items are processed or prepared and sold to the public shall comply with this section.

Exception: Food peddlers operating a retail food establishment from a vehicle designated to be readily movable in which food is; sold or given away but not composed, compounded, thawed, reheated, cut, cooked, processed or prepared.

- **4106.2** A Type I hood shall be installed at or above all commercial cooking appliances and domestic cooking appliances used for commercial purposes that produce grease vapors. Commercial kitchen exhaust hoods shall comply with the requirements of the *International Mechanical Code*.
- **4106.2.1 Maintenance.** Hoods shall be inspected, tested, and maintained in accordance with this code and the *International Mechanical Code*.
- 4106.2.2 Inspections and tests. Kitchen hood extinguishing systems shall be inspected and tested every six months by a state of Iowa licensed fire protection contractor.
- 4106.3 Fire extinguishers. Portable fire extinguishers shall be provided within a 30-foot (9144 mm) travel distance of commercial-type cooking equipment. An approved 2A:20B:C rated dry chemical fire extinguisher shall be provided within 30 feet (9144 mm) of any commercial cooking equipment. Additionally, cooking equipment involving solid fuels or vegetable or animal oils and fats shall be protected by a Class K rated portable extinguisher in accordance with section 904.12.5.1 or 904.12.5.2, as applicable.
- 4106.4 Liquefied petroleum gas (LP-gas). LP-gas shall be in accordance with Chapter 61 and NFPA 58.
- **4106.4.1 Maximum number and quantity.** A maximum of two LP-gas containers with a total aggregate water capacity of 50 gallons (190 L) is permitted at one mobile food vehicle.
- **4106.4.2 LP-gas cylinder hoses.** Hoses shall be designed for a working pressure of 350 psig (2413 kPa) with a safety factor of 5 to 1 and shall be continuously marked with LP-GAS, PROPANE, 350 PSI WORKING PRESSURE, and the manufacturer's name or trademark. Hose assemblies, after the application of couplings, shall have a design capability of 700 psig (4826 kPa). Hose assemblies shall be leak tested at the time of installation at not less the operating pressure of the system in which they are installed.

4106.5 Location. Mobile food vehicles shall not be located within 20 feet (6096 mm) of buildings, tents, canopies or membrane structures.

SECTION 4107

SPECIAL AMUSEMENT BUILDINGS

4107.1 General. [B] Special amusement buildings shall be in accordance with this section and section 411 of the International Building Code.

Exception: Amusement buildings or portions thereof, which are without walls or a roof and are constructed to prevent the accumulation of smoke.

4107.2 Use of combustible decorative materials. Use of combustible decorative materials shall be in accordance with Chapter 8.

4107.3 Assistance. Adult monitors with flashlights shall be available to provide assistance in the event someone becomes lost or disoriented. One adult monitor shall be provided for every 60 persons.

4107.4 Automatic sprinkler system. Special amusement buildings shall be equipped throughout with an automatic sprinkler system in accordance with Chapter 9.

4107.4.1 Temporary special amusement buildings. Where the special amusement building is temporary, the sprinkler water supply shall be of an approved temporary means. The sprinkler piping shall be connected to a temporary water supply having sufficient capacity (flow and pressure) to supply residential or standard quick spray response sprinkler heads at a minimum design density of 0.15 gpm (.57 LPM) per square foot of protected floor area. The design shall be based on flowing the six most hydraulically remote sprinkler heads. Should the temporary amusement building contain less than six heads, the design shall assume that all heads are flowing simultaneously.

The temporary water supply may be connected to a domestic water line, a fire line, or temporary on-site storage tank as long as the minimum design densities are met. An indicating type control valve shall be installed in an accessible location between the sprinkler system and the connection to the water supply.

SECTION 4108

MAZES

4108.1 General. Mazes including, but not limited to corn stalk or hedge mazes, shall be in accordance with section 3808.

- 4108.1.2 Safe refuge areas. Safe refuge areas shall be established outside of the maze or building and structure, and shall not be closer than 50 feet (15240mm).
- **4108.1.3 Paths.** Paths throughout the maze shall be a minimum of 36 inches (914mm) in width and shall be clear and unobstructed width.
- **4108.1.4 Separation.** A minimum of 20 feet (6096mm) shall be provided between mazes and buildings and structures. The 20-foot (6096mm) clearance shall be free from vegetation and obstructions.
- 4108.1.5 Means of egress. Each exit shall be a minimum of 6 feet (1828mm) wide.
- 4108.1.5.1 Travel distance. The maximum travel distance to reach an exit access shall not exceed 75 feet (22,860mm). The travel distance shall be determined by using the maze path.
- 4108.1.5.2 Number. The travel distance required to reach an exit access shall determine the number of exits required. Locking devices shall remain unlocked on exits when the maze is occupied.
- **4108.1.5.3 Exit signs.** Exit signs shall be provided next to or above each exit. The lettering shall be a minimum of 12 inches (305mm) high with 2-inch (51mm) brushstroke. The signs shall read EXIT with lettering in a color contrasting to the sign's background.
- 4108.2 Event plans. The following plans shall be submitted to the Fire Code Official.
- 4108.2.1 General fire safety plan. The plan shall include, but not be limited to procedures that shall be used to prevent over-drying of vegetation throughout the site, documentation of decorative materials flame-retardancy, the maximum number of attendees.
- 4108.2.2 Security plan. The plan shall document who shall provide security (e.g., off-duty police officers, sheriff's posse, employees). All security personnel shall be provided with a 2-way radio and flashlight.
- **4108.2.3 Evacuation plans.** The plan shall document the responsibilities of all on-site employees. The plan shall also document how attendees will be evacuated, and where they will be evacuated.
- 4108.2.4 Maze rules. Maze rules shall be posted at maze entrance.
- **4108.3** Employee responsibilities. Each employee shall be familiar with the evacuation plan and with fire extinguisher locations. Documentation of training shall be provided to the Fire Code Official.
- 4108.3.1 Guides. An employee shall be responsible for guiding a group of not more than 14 attendees through the maze. Each employee shall be provided with a minimum of one flashlight

and two-way radio. The employees shall be responsible for detecting and reporting fire or smoke to a competent person posted at the maze main entrance and begin evacuation procedures.

4108.3.2 Main entrance employee. Each maze shall be manned by an employee at the entrance. The employee shall be capable of communicating with the employees and shall be provided with a cellular telephone. When the main entrance employee receives a report of smoke, fire or injury, the employee shall immediately call 9-1-1.

4108.4 Watering. Corn stalk and hedge mazes shall be provided with sufficient water and at a frequency that prevents the vegetation from becoming dry or brittle. Failure to comply with this provision is an imminent hazard and the Fire Code Official shall issue a stop order.

4108.5 Buildings and structures. When buildings and structures are intended to be occupied by attendees, the building and structure shall comply with section 3807.

SECTION 4109

COVERED MALL BUILDINGS

4109.1 General. Temporary use of the common pedestrian area within a covered mall building for promotional, Group A, Group E, Group M or similar activities shall be in accordance with section 3809.

4109.2 General requirements.

4109.2.1 Main aisle width. Main aisles shall be a minimum of 10 feet (3048mm) in width or the minimum required means of egress width, whichever is greater, and shall be maintained in accordance with Chapter 10. Main aisles shall not be obstructed.

4109.2.2 Cross aisle width. Cross aisles shall be a minimum of 15 feet (4572mm) in width or the required means of egress width, whichever is greater, and shall be maintained in accordance with Chapter 10.

4109.2.3 Fueled equipment. Liquid- or gas-fueled, or electric appliances, tools, apparatus, craft or vehicles shall be displayed in a mall in accordance with section 314. LP-gas powered floor maintenance machines may be used when in accordance with Chapter 61.

4109.3 Combustible decorative materials. Combustible decorative materials shall be in accordance with Chapter 8.

Insert Code section: IFC 5601.4 Exception 1

Language:

HAZARDOUS MATERIALS - GENERAL PROVISIONS

Add section 5003.13 Hazardous Substances, Notification and Cleanup.

- A. Scope. This section shall apply to the release of hazardous substances and the notification, cleanup, and recovery of costs associated with the mitigation of hazardous conditions.
- B. Definitions. For the purpose of this section, these words have the following meaning:
 - 1. "Cleanup" means the removal of the hazardous substances to a place where the waste will not cause any danger to persons or the environment, in accordance with applicable statutes, rules, and regulations, or the treatment of the material as defined herein to eliminate the hazardous condition, including the restoration of the area to a general good appearance without noticeable odor as much as practicable. "Cleanup" includes all actions necessary to contain, collect, identify, analyze, treat, disperse, remove, or dispose of a hazardous substance and to restore the sites from which such hazardous substance was cleaned up.
 - 2. "Hazardous condition" means any situation involving the actual, imminent, or probable spillage, leakage, or release of a hazardous substance.
 - a. Within the City or onto City property located outside the City which, because of the quantity, strength, and toxicity of the hazardous substance, its mobility in the environment and its persistence, creates an immediate potential danger to the public health or safety; or
 - b. Onto land, into the waters within the State of Iowa or into the atmosphere, but outside the City, which, because of the quantity, strength, and toxicity of the hazardous substance, its mobility in the environment and its persistence, creates an immediate potential danger to the public health or safety of persons or property within the City.

Hazardous conditions include any accident involving hazardous materials required to be reported under section 321.266(4) of the Code of Iowa.

"Hazardous substance" means any substance or mixture of substances that 3. presents a danger to the public health or safety or environment and includes, but is not limited to, a substance that is toxic, corrosive, or flammable, or that is an irritant or that, in confinement, generates pressure through decomposition, heat, or other means. The following are examples of substances which, in sufficient quantity, may be hazardous: acids; alkalis; explosives; fertilizers; heavy metals such as chromium, arsenic, mercury, lead, and cadmium; industrial chemicals; paint thinners; paints; pesticides; petroleum products; poisons; radioactive materials; sludges; and organic solvents. "Hazardous substance" includes any hazardous waste identified or listed by the administrator of the United States Environmental Protection Agency under the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act of 1976, or any toxic pollutant listed under section 307 of the Federal Water Pollution Control Act of 1976, as amended to January 1, 1977, or any hazardous material designated under section 311 of the Federal Water Pollution Control Act as amended to January 1, 1977, or any hazardous materials designated by the Secretary of Transportation under the Hazardous Materials Transportation Act, or any hazardous substance

- listed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980.
- 4. "Person" is a natural person, his heirs, executors, administrators, or assigns, and also includes a firm, partnership, or corporation, its or their successors or assigns, or any other similar legal entity or the agent of any of the aforesaid.
- 5. "Responsible person" means the person, whether the owner, agent, lessor, or tenant, in charge of the hazardous substance being stored, processed, or handled, or the owner or company transporting hazardous wastes or substances whether on public ways or grounds or on private property where the spill would cause danger to the public or to any persons or to the environment.
- 6. "Treatment" means a method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of a hazardous substance so as to neutralize it or to render the substance non-hazardous, safer for transport, amenable for recovery, amenable for storage, or to reduce it in volume.

Treatment includes any activity or processing designed to change the physical form or chemical composition of hazardous substance to render it non-hazardous.

- C. Notifications. When a hazardous condition is created, the responsible person shall notify WestCom and the West Des Moines Fire Department immediately upon discovery of the condition, but in no instance later than thirty (30) minutes after the discovery of the hazardous condition.
- D. Cleanup Required. Whenever a hazardous condition is created by the deposit, injection, dumping, spilling, leaking, or placing of a hazardous substance, so that the hazardous substance, or a constituent of the hazardous substance, may enter the environment or be emitted into the air or discharged into any waters, including ground waters, the Fire Chief or the Chief's designee may remove or provide for removal and the disposal of the hazardous substance at any time, unless the Fire Chief or the Chief's designee determines such removal will be properly and promptly accomplished by the responsible person. If the responsible party does not initiate and complete cleanup within the time designated by the Fire Department, the City may proceed to remedy the hazardous condition by performing the necessary cleanup services.
- E. Loss, Burden or Costs. A responsible person shall be liable to the City for all mitigation costs incurred by the City or other contract agencies, including but not limited to, chemical damage, contamination of equipment, and the use of consumable materials. If charges for such cleanup costs are not paid within thirty (30) days after invoice, the City shall proceed to obtain payment by all legal means.

EXPLOSIVES AND FIREWORKS

Amend section 5601.1 Scope. It shall be unlawful without a permit for any person to use or explode any explosives, explosive materials, and fireworks within the corporate limits of the City of West Des Moines.

Exceptions:

- 1. The Armed Forces of the United States, Coast Guard, or National Guard.
- 2. Explosives in forms prescribed by the official United States Pharmacopoeia.
- 3. The possession, storage, and use of small ammunition when packaged in accordance with DOT packaging requirements.
- 4. The possession, storage, and use of not more than 1 pound (0.454 kg) of commercially manufactured sporting black powder, 20 pounds (9 kg) of smokeless powder and 10,000 small arms primers for hand loading of small arms ammunition for personal consumption.
- 5. The use of explosive materials by federal, state, and local regulatory, law enforcement and fire agencies acting in their official capacities.
- 6. Special industrial explosive devices which in the aggregate contain less than 50 pounds (23 kg) of explosive materials.
- 7. The possession, storage, and use of blank industrial power load cartridges when packaged in accordance with DOT packaging regulations.
- 8. Transportation in accordance with DOT 49 CFR Parts 100-178.
- 9. Items preempted by federal regulations.

Amend section 5601.2.4 Financial Responsibility to read as follows. The applicant shall, at the time he or she makes his or her application for a permit, attach thereto a bond or certificate of insurance naming the applicant and the City as insured, in the sum of not less than \$1,000,000.00, provided that the Fire Code Official or the City Council may at their discretion require a greater amount. Said bond and insurance shall inure to the use and benefit of the City and/or any person who suffers damage either to person or property by reason of said display of fireworks.

Amend section 5601.4 Qualifications. Persons in charge of magazines, blasting, fireworks display, or pyrotechnic special effect operations shall not be under the influence of alcohol or drugs which impair sensory or motor skills, shall be at least 21 years of age, and shall demonstrate knowledge of all safety precautions related to the storage, handling, or use of explosives, explosive materials, or fireworks.

Exception: Persons in charge of firework displays, or pyrotechnic special effect operations, shall possess a valid PGI Display Fireworks Operator Certification or equivalent certification approved by the Fire Code Official.

Amend section 5605.1 Manufacture, Assembly, and Testing of Explosives, Explosive Materials, and Fireworks

General: It shall be unlawful to manufacture, assemble, and test explosives, explosive materials, and fireworks within the corporate limits of the City of West Des Moines.

Exceptions:

1. The hand loading of small arms ammunition prepared for personal use and not

- offered for sale.
- 2. The mixing and loading of blasting agents at blasting sites in accordance with NFPA 495.
- 3. The use of binary explosives or plosophoric materials in blasting or pyrotechnic special effects applications in accordance with NFPA 495 or NFPA 1126.

FLAMMABLE AND COMBUSTIBLE LIQUIDS

Add section 5704.2.9.7.10 Alternative Containment and Protection. All tanks that have a secondary tank of steel, concrete, or approved materials shall be capable of holding 110% of the product stored. A non-combustible roof and roof framework shall cover all open top secondary tanks exposed to weather.

LIQUEFIED PETROLEUM GASES

Amend section 6104.2 Maximum Capacity within established limits. Within the limits established by law in the adopting ordinance 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 1,000 gallons. Within the limits established by law in the adopting ordinance restricting the storage of liquefied petroleum gas for the protection of L1 light industrial districts and G1 general industrial districts, the aggregate capacity of any one installation shall not exceed a water capacity of 5,000 gallons.

Add section 6104.3.3

LP Gas shall not be stored or used inside of a building.

REFERENCED STANDARDS

NFPA 10	2018
NFPA 13	2019
NFPA 13D	2019
NFPA 13R	2019
NFPA 20	2019
NFPA 30	2021
NFPA 30A	2021
NFPA 70	2020
NFPA 72	2019
NFPA 96	2021
NFPA 101	2021
NFPA 2001	2018

APPENDIX D

FIRE APPARATUS ACCESS ROADS

Amend D101.1 Scope. Fire apparatus access roads shall be in accordance with this appendix and all other applicable requirements of the International Fire Code. Public streets are regulated using the State Wide Urban Design and Specifications for public improvements as amended by the City of West Des Moines. Private streets are also regulated using the State Wide Urban Design and Specifications for public improvements as amended by the City of West Des Moines.

Amend D103.2 Grade. Fire apparatus access roads shall not exceed State Wide Urban Design and Specifications for public improvements or as approved by City Engineer.

Amend D103.3 Turning Radius. The minimum turning radii shall be determined by the Fire Code Official.

Amend D103.4 Dead Ends. For residential properties, the maximum dead-end length for a public or private street is 750 feet constructed with a 37.5 foot radius cul-de-sac bulb, or a temporary turnaround for temporary construction or phasing approved by the City of West Des Moines Fire Marshal. The maximum dead-end length for a public or private street may be extended to 1,500 feet if each residential property located beyond 750 feet includes an approved fire sprinkler system and there is an approved turnaround every 750 feet. (The City Engineering Department and Fire Marshal can provide examples of approved turn a round requirements). For commercial and industrial properties, the maximum dead-end length is 750 feet constructed with a 50 foot radius cul-de-sac bulb, or a temporary turnaround for temporary construction or phasing approved by the City of West Des Moines Fire Marshal.

Amend D103.5 Fire Apparatus Access Road Gates. Gates securing fire apparatus access roads shall comply with all of the following criteria:

- 1. The minimum gate width shall accommodate a 14-foot clear drive lane width.
- 2. Gates shall be of the swinging or sliding type.
- 3. Construction of the gate shall be of materials that allow for manual operation by one person.
- 4. Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.
- 5. Electric gates shall be equipped with a means of opening the gate by fire department personnel for emergency access. Emergency opening devices shall be approved by the Fire Code Official.
- 6. Manual opening gates shall not be locked with a padlock or chain unless they are capable of being opened by means of forcible entry tools.
- 7. Locking device specifications shall be submitted for approval by the Fire Code Official prior to installation.

Amend D103.6 Signs. Where required by the Fire Code Official, fire apparatus access roads shall conform to section 511.4. Signs shall be posted on one or both sides of the fire apparatus road as required by section D 103.6.1 or D 103.6.2.

Amend D103.6.1 Roads 20 to 26 feet in Width. Fire apparatus access roads 20 to 26 feet wide shall be posted on both sides as a fire lane when required by the Fire Code Official.

Amend D103.6.2 Roads more than 26 feet in Width. Fire apparatus access roads more than 26 feet wide shall be posted on one side of the road as a fire lane when required by the Fire Code Official.

Section D104 Commercial and Industrial Developments.

Delete sections D104.1 and D104.2 and Replace with the following wording.

D104.1 Access. All buildings, to include commercial, industrial developments, multiple family residential developments and one or two family residential developments, shall have a minimum of two fire apparatus accesses/access roads as approved by the Fire Code Official. Based on the building occupancy hazard, the Fire Code Official may require more than two fire apparatus accesses. The Fire Code Official may reduce this requirement for just cause as long as safety to the buildings/occupants is not jeopardized. All accesses/access roads shall have a minimum clear width of 20 feet and shall support an imposed load of 75,000 lbs.

Amend D104.3 Remoteness. Where two accesses/access roads are required, they shall be placed a distance apart equal to not less than one-half the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses. The Fire Code Official may reduce the separation distance between accesses for just cause as long as safety to the buildings/occupants is not jeopardized.

Delete section D106, D106.1, and D106.2

Amend section D107.1 One or two-family dwelling residential developments.

This section only applies during construction if the maximum dead-end lengths outlined in section D103.4 are not exceeded.

Delete D107.1 Exception 1

4-3-5: APPEALS:

- A. Appeals Process: Any person aggrieved by the decision of the Fire Code Official may appeal the decision to the Municipal Code Hearing Officer as set out in Title 4, Chapter 4, Section 10 of the Municipal Code. The appeal shall be completed by filing a written notice of appeal with the City Clerk within fourteen (14) days from the date of issue of the written decision by the Fire Code Official. For appeal purposes, the date of issue shall be the date the Fire Code Official signs, dates, and mails the written decision. Failure to file a timely notice of appeal as required herein shall constitute a waiver of the right to appeal and the decision of the Fire Code Official shall be final.
- B. The notice of appeal shall clearly set forth with specificity each and every ground that serves as the basis for the appeal, and it shall be accompanied by copies of plans, specifications, or any pertinent information, which may be required to adequately

- evaluate the appeal. Any matter not specifically raised in the notice of appeal shall be deemed to be final and shall not be reviewed by the Municipal Code Hearing Officer.
- C. The notice of appeal shall also be accompanied by a one hundred dollar (\$100.00) filing fee for administrative and publication costs.
- D. Upon receipt of a timely filed notice of appeal, the City shall schedule the appeal for hearing before the Municipal Code Hearing Officer.
- E. The hearing shall be scheduled no later than twenty (20) working days after the date on which the written petition was filed and may be extended for a reasonable period at the Municipal Code Hearing Officer's discretion, or upon written request from the petitioner or the Fire Code Official, for good cause shown.
- F. In the event that an ambiguity arises as to an interpretation of the Code, the Municipal Code Hearing Officer may interpret the Code as applied to the specific instance presented. Such decisions shall be on a case-by-case basis and shall not be binding in future cases.
- G. The Municipal Code Hearing Officer shall not waive any requirements of the Code unless the Municipal Code Hearing Officer concludes that the provision(s) is unduly burdensome or impracticable under the circumstances. Such decisions will also be as a case-by-case basis and shall not be binding in future cases.
- H. Hearing Procedure: The procedures provided in Title 4, Chapter 4, Section 10(E) of the Municipal Code shall apply to hearings held under this chapter.

4-3-6: NEW MATERIALS, PROCESSES, OR OCCUPANCIES WHICH MAY REQUIRE PERMITS:

The Building Official and the Fire Code Official of the Fire Department shall act as a committee to determine and specify, after giving affected persons an opportunity to be heard, any new materials, processes, or occupancies for which permits are required in addition to those now enumerated in said Code. The Fire Code Official shall post such list in a conspicuous place at the administrative offices of the Fire Department and distribute copies thereof to interested persons.

4-3-7: LIABILITY FOR DAMAGES:

- 1. This Code is enacted only for the purpose of securing to individuals the enjoyment of rights and privileges to which they are entitled as members of the public, rather than for the purpose of protecting any individual from harm.
- 2. The City, its officers, employees, or agents make no representations or warranties of any kind whatsoever, expressed or implied, with respect to the completeness or thoroughness of the inspections and examinations performed under this Code, but

said inspections are made solely to assist the owner of the building, structure, equipment, and premises to meet certain minimum requirements of this Code and to compel, if necessary, the owner to meet the minimum requirements for the protection of the health, welfare, and safety of persons and property. Nothing herein contained in this Code shall alleviate the owner of any building, structure, equipment, and premises from making an independent inspection in order to fulfill the requirements of this Code, nor shall this Code be construed to relieve or lessen the responsibility of any person owning, operating, or controlling any building, structure, equipment, or premises regulated herein from any damages to any person or property caused by defects or Code violations. The City, its officers, employees, or agents shall not be held as assuming any liability for damages to any person or property by reason of any inspections authorized by this Code or investigations, or any approvals issued herein, or for any act or failure to act in the enforcement of this Code.

4-3-8: VIOLATIONS AND PENALTIES:

A violation of this chapter is a simple misdemeanor and is punishable by a fine not to exceed eight hundred and fifty dollars (\$850.00) and/or a term of imprisonment not to exceed thirty (30) days. A violation of this Chapter may also be declared a municipal infraction and be punishable as provided in Title 1, Chapter 4, Section 1 of this Code. Pursuant to Iowa Code section 100.41, the officials of the Fire Prevention Bureau shall have the authority to issue citations for violations of this chapter. Officials of the Fire Prevention Bureau shall have the discretion to enforce this Chapter either as a municipal infraction or a simple misdemeanor.

4-3-9: REPEALER:

In any case where the provisions of this chapter, or the Fire Code hereby adopted, are found to be in conflict with any provision of Iowa Code or regulations of the State Fire Marshal, or any provision of any zoning, building, fire, electrical, plumbing, mechanical, safety, or health ordinance or Code of the City, the provision which establishes the higher standard for the promotion and protection of the safety of persons and property shall prevail.

4-3-10: SAVING CLAUSE:

The City hereby declares that should any section, paragraph, sentence, or word of this chapter or of the Code hereby adopted be declared for any reason to be invalid, it is the intent of the City Council that it would have passed all other portions of this chapter independent of the elimination here from of any such portion as may be declared invalid.

4-3-11: EFFECTIVE DATE:

This chapter shall be in full force and effect on January 1, 2024.

PASSED AND APPROVED this 18th day of December, 2023

Russ Trimble, Mayor

ATTEST:

yan Jacobson, City Clerk