

ORDINANCE NO. 2021-13

AN ORDINANCE OF THE MAYOR AND COUNCIL OF THE CITY OF PEORIA, ARIZONA AMENDING CHAPTER 9 OF THE PEORIA CITY CODE (1992) BY AMENDING SECTION 9-31, INTERNATIONAL FIRE CODE, ADOPTED; AMENDING SECTION 9-32, INTERNATIONAL FIRE CODE, DEFINITIONS; AMENDING SECTION 9-33 INTERNATIONAL FIRE CODE, LOCAL AMENDMENTS; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

THEREFORE, IT IS ORDAINED by the Mayor and Council of the City of Peoria, Maricopa County, Arizona as follows:

SECTION 1. Chapter 9 of the Peoria City Code (1992) is amended by amending Section 9-31 pertaining to the International Fire Code, Adopted, which shall read as follows:

Sec. 9-31. - International Fire Code - Adopted.

- (a) There is adopted by the City for the purpose of prescribing minimum regulations governing conditions hazardous to life and property from fire and explosion, that certain code which is now on file in the City Clerk's office known as the "International Fire Code (IFC) 2018 Edition" as amended from time to time and not inconsistent with anything herein provided, and the Referenced Standards as published by the International Code Council, as amended from time to time and not inconsistent with anything herein provided and that such codes and standards may hereafter be referred to as the IFC and the following appendix chapters.
- (b) Where there is a conflict between the provision of the International Fire Code and this Chapter of the City Code, the more restrictive shall apply.
- (c) The following Appendices of the International Fire Code are adopted in their entirety:

Appendix B-Fire-Flow Requirements for Buildings.

Appendix C-Fire Hydrant Locations and Distribution.

Appendix D-Fire Apparatus Access Roads.

Appendix E-Hazard Categories.

Appendix F-Hazard Ranking.

Appendix G-Cryogenic Fluids, Weight and Volume Equivalents.

Appendix H-Hazardous Materials Management Plan (HMMP) and Hazardous Materials Inventory Statement (HMIS) Instructions.

Appendix I-Fire Protection Systems—Noncompliant Conditions.

Appendix J- Building Information Sign.

Appendix K-Construction Requirements for Existing Ambulatory Care Facilities.

Appendix L-Requirements for Fire Fighter Air Replenishment Systems.

Appendix M-High Rise Buildings-Retroactive Automatic Sprinkler Requirement.

Appendix N-Indoor Trade Shows and Exhibitions.

(d) Assuming Jurisdiction of Fire Prevention Standards:

Pursuant to A.R.S. § 37-1383, the City of Peoria, having in effect a nationally recognized fire code, does hereby assume jurisdiction from the Office of State Fire Marshal for prescribing and enforcing fire prevention standards throughout the City. The City of Peoria does not have authority that supersedes and is not exempt from the State Fire Code established pursuant to A.R.S. § 37-1383(A)(5) in State or county owned buildings wherever located throughout the State.

SECTION 2. Chapter 9 of the Peoria City Code (1992) is amended by amending Section 9-32 pertaining to the International Fire Code, definitions and which shall read as follows:

Sec. 9-32. International Fire Code, definitions.

- (a) "Access Grades". Access grades shall include the table set forth in Table 9-33(e).
- (b) *"Adult Day Health Care Facility,"* for purposes of Arizona Department of Health Services regulations as may be amended from time to time, means a facility providing adult day health services during a portion of a continuous twenty-four hour period for compensation on a regular basis for five or more adults not related to the proprietor. These are classified as I-4 occupancies.
- (c) "All Weather Surface". An all-weather surface (AW) is a road surface made up of materials compacted to 90% and capable of supporting vehicles in excess of 75,000 pound gross vehicle weight (GVW) under any weather condition.
- (d) *"Assisted Living Center,"* for purposes of Arizona Department of Health Services regulations as may be amended from time to time, means an assisted living facility that provides resident rooms or residential units to eleven (11) or more residents. These are classified as I-1 or I-2 occupancies.

- (e) *"Assisted Living Facility,"* for purposes of Arizona Department of Health Services regulations as may be amended from time to time, means any residential care institution, including adult foster care, that provides or contracts to provide supervisory care services, personal care services, or directed care services on a continuing basis. These are classified under R-3, R-4, I-1, or I-2 occupancies.
- (f) *"Assisted Living Home,"* for purposes of Arizona Department of Health Services regulations as may be amended from time to time, means an assisted living facility that provides resident rooms or residential units for ten (10) or fewer residents. These are classified as follows: 5 or less residents = R-3 occupancy, 6-10 residents = R-4 occupancy.
- (g) *"Commercial Occupancy".* A commercial occupancy is any building that falls under the International Building Code (IBC) occupancy classification of A, B, E, F, H, I, M, R1, R-2, R-4, and S.
- (h) *"Competent on-site person"* is the individual that is the responsible party on the job site that is directly supervising the fire protection system installation.
- (i) *"Direct Self-Care,"* for purposes of Arizona Department of Health Services regulations as may be amended from time to time, means a resident that is ambulatory and is able to direct their own care. (Required for any resident housed on a floor that does not open to the ground floor.
- (j) *"Direct Supervision"* means the physical presence of a manager, caregiver, or responsible person providing direction during an activity or function.
- (k) *"Directed Care Services,"* for purposes of Arizona Department of Health Services regulations as may be amended from time to time, means programs and services, including personal care services provided to persons who are incapable of recognizing danger, summoning assistance, expressing need or making basic care decisions. These are classified as follows: 5 or less residents = R3 occupancy, 6 or more residents = I2 occupancy, non-self preserving.
- (l) *"Drive Length".* Drive Length is measured from the entrance of the drive at the public street to the structure.
- (m) *"Drive Width".* Drive Width is measured from the edges of the designated improved drivable surface. 2-12-2 and 2-16-2, is a 2 foot clear AW surface on both sides of a 12 or 16 foot hard surface drive.
- (n) Where the words *"Fire Code Official"* are used in the International Fire Code, they shall be held to mean the Fire Chief or their designee.
- (o) *"Grade".* Grade is the degree of inclination of a slope, road, or other surface (see slope).
- (p) *"Hard Surface".* Hard Surface is a drive surface of concrete, asphalt, or pavers designed to support vehicles in excess of 75,000 pounds GVW under any weather condition.

- (q) "Horizontal Standpipe". A horizontal standpipe, also known as a yard hydrant, is a permanent extension of the required firefighting water supply for a building. The horizontal standpipe can be below grade and can be a wet or dry standpipe. The horizontal standpipe is required to be able to supply a minimum of 500 gallons per minute at the outlet. The use of horizontal standpipes must be approved by the Fire Code Official.
- (r) "Hose Lay". Hose Lay is the extension of a hand held fire hose as it is extended around the perimeter of the structure. If the hose lay is more than 200 feet from the road to all portions of the exterior, an Operational Platform is required.
- (s) "Impairment" means decreased strength, value, amount, or quality. An impaired fire protection system is a system that will not function as required by national standards. The impairment can be caused by damage, alterations, lack of maintenance, or poor design.
- (t) Where the words "Jurisdiction" are used in the International Fire Code, they shall be held to mean the City of Peoria.
- (u) Where the words "Legal Counsel" are used in the International Fire Code, they shall be held to mean the City Attorney for the City of Peoria, Arizona.
- (v) "Non-Self Preserving," for purposes of Arizona Department of Health Services regulations as may be amended from time to time, means persons not capable, physically or mentally, of responding to an emergency situation without physical assistance from staff.
- (w) "Operation Platform". Operational Platform is an area located on site where the emergency vehicle is staged while performing emergency medical or firefighting operations. The platform shall be 20 feet by 30 feet with a maximum cross grade of 5 percent. Operational platforms are required when a drive or adjacent street grade is greater than 12% slope or the hose lay from the truck staging area to all portions of the exterior of the structure are greater than 200 feet.
- (x) "Personal Care Services," for purposes of Arizona Department of Health Services regulations as may be amended from time to time, means assistance with activities of daily living that can be performed by persons without professional skills or professional training and includes the coordination or provision of intermittent nursing services and the administration of medications and treatment by a nurse who is licensed pursuant to A.R.S. Title 32, Chapter 15, or as otherwise provided by law. These are classified as follows: licensed for 5 residents or less = R3 occupancy, licensed for 6 residents or more = I-2 occupancy.
- (y) "Repair". Repair of any fire protection equipment is a "like for like" replacement of a component. The component replaced must be from the same manufacturer and be the same model and part number.
- (z) "Replacement". Replacement of any fire protection system component must be by the same manufacturer, the same model and part number.

Replacement of a component by a different manufacturer, model or part number due to obsolescence is considered an upgrade.

- (aa) *"Residential Care Institution,"* for purposes of Arizona Department of Health Services regulations as may be amended from time to time, means a health care institution other than a hospital or a nursing care institution which provides resident beds or residential units, supervisory care services, personal care services, directed care services, or health-related services for persons who do not need inpatient nursing care.
- (bb) *"Self Preserving,"* for purposes of Arizona Department of Health Services regulations as may be amended from time to time, means persons capable, physically and mentally, of responding to an emergency situation without physical assistance from staff.
- (cc) *"Slope".* Slope is the ground, road or other surface that forms a natural or artificial incline. The percentage of slope is determined by dividing the rise by the horizontal run multiplied by 100 [% slope = (Rise/Run) X 100].
- (dd) *"Supervisory Care Services,"* for purposes of Arizona Department of Health Services regulations as may be amended from time to time, means general supervision, including daily awareness of resident functioning and continuing needs, the ability to intervene in a crisis, and assistance in the self-administration of prescribed medications. This can be in any type of facility because the residents are self preserving.
- (ee) *"Temporary Use".* Temporary Use is the use of a facility or structure for an agreed upon specified period of time.
- (ff) *"Turn-a-round".* A turn-a-round is required for emergency vehicles when the structure is more than 200 feet from the road. This can be accomplished with a circle drive with an outside radius of 40'-6", T-Type hammer head 16' X 76', or a variation there of.
- (gg) *"Turning Radius".* A turning radius, for the purpose of this code, defines the required area for fire apparatus movement. Fire apparatus movement is based on the WB-50 turning template as produced by the American Association of State Highway and Transportation Officials (AASHTO).
- (hh) *"Turn-out".* A turn-out is required on all extended driveways 300 feet or greater in length to a single residence. A turnout shall widen to 20 feet minimum width over a minimum length of 45 feet.
- (ii) *"Upgrade".* Upgrade of a fire protection system is anytime a major system component is replaced by a different manufacturer, model or part number due to obsolescence or to expand capacity.

**SECTION 3.** Chapter 9 of the Peoria City Code (1992) is amended by amending Section 9-33 pertaining to the International Fire Code, Local Amendments and which

shall read as follows:

Sec. 9-33. International Fire Code, Local Amendments.

(a) ~~Section 102.3 Change of Use or Occupancy is amended by replacing the words “this code” with “the currently adopted Fire Code and amendments,” designating the existing text as subsection 1 and adding the following paragraph as subsection 2.~~

~~Section 102.3 Change of Use or Occupancy.~~

~~2. All changes of occupancy shall be coordinated with the Fire Marshal prior to issuance of a Temporary or Permanent Certificate of Occupancy.~~

(b) ~~Section 102.4 Application of building code is amended by adding the words “and the currently adopted Fire Code and amendments” after “International Building Code.”~~

(c) ~~Section 102.6 Historic buildings is amended by adding the words “and the currently adopted Fire Code and amendments” after “approved fire protection plan.”~~

(a) Section 104.3 Right of entry is hereby amended by adding the following and shall read as follows:

~~Section 104.3.1. The Fire Medical Department shall inspect, as often as necessary, buildings and premises, including such other hazards or appliances designated by the Fire Chief for the purposes of ascertaining and causing to be corrected any of the conditions which would reasonably tend to cause fire or contribute to its spread, or any violation of the purpose or provisions of this code and of any other law or standard affecting fire safety. Any person who refuses entry for purposes of this provision shall be in violation of Peoria City Code Section 9-43(a) and subject to the penalties prescribed in Peoria City Code Section 9-42, including civil sanctions identified in 9-42(b).~~

(b) Section 104.6 Official Records is hereby amended by adding subsection 104.6.5 Required information and shall read as followsthe following:

104.6.5 Required information. Each business and building owner shall provide the following information to the Fire Code Official upon request: Responsible party address, responsible party telephone number, building owner address, building owner telephone number, square footage of the building and/or leased space, Insurance company name, Insurance company policy number, and Insurance company telephone number.

(c) ~~Section 104.10 Fire Investigations is amended with the following new section:~~

~~104.10 Fire Investigations. The Fire-Medical Department shall investigate or cause to be investigated promptly the cause, origin and circumstance of each and every fire occurring in the jurisdiction involving loss of life or injury to a person or destruction or damage to property, and if it appears to the member of the Fire-Medical Department making the investigation that such fire is of suspicious origin, the member shall notify the appropriate law enforcement agency and shall secure the site until the law enforcement agency takes control of the site. The Fire Investigator shall continue to pursue the investigation to its conclusion.~~

(d) ~~Section 104.11.4 Restricting Public Access is amended with the following new section:~~

~~It shall be the duty of the Police Department, at the time of any fire, to place ropes or guards across all streets, lanes or alleys on which shall be situated any building on fire, and at such other points as are deemed expedient and necessary. Any person entering within the line indicated by such ropes or guards and refusing to go outside such lines when directed to do so by any police officer or officer of the fire department shall be guilty of a class one misdemeanor.~~

(e) ~~Section 105.1.1 Permits required is amended by adding the following at the end of the paragraph:~~

~~It shall be unlawful for any person, firm or corporation to use a building or premises or engage in any activities for which a permit is determined to be required by the Fire Code Official without having first obtained such permit from the Fire-Medical Department.~~

(c) Section 105.2 Application is amended and replaced with the following new sections shall read as follows:

Section 105.2 Application. Application for a permit required by this code shall be made to the Fire Code Official in such form and detail as prescribed by the Fire Code Official no later than thirty (30) days prior to date of the event. Applications for permits shall be accompanied by such plans as prescribed by the fire code official.

Scope. Fees for reviewing plans, issuing permits and conducting inspections relating to construction or installation of automatic sprinkler systems, fire alarm systems, hood and duct fire-extinguishing systems and other fire- and life-safety systems for compliance with the International Fire Code and other laws and ordinances, and other services provided shall be set by the Fire-Medical Department. The following contains a Uniform Fees and Charges Program for the City of Peoria Fire-Medical Department.

#### Permit and Service Fees Ordinance

Purpose. The purpose of this ordinance is to establish fees for specific Fire Code permits as defined in the International Fire Code, as adopted by this jurisdiction and for the establishment of fees for service performed by the Fire-Medical Department.

Definitions. All terminology not defined in this chapter shall be defined as stated in the International Fire Code as adopted by this jurisdiction.

Permits and Service Fees: A fee in accordance with the following schedule shall be paid to the Fire Department at the time of application for: (1) a RENEWABLE PERMIT, (2) and INSTALLATION or REMOVAL and ALTERATION PERMIT, (3) an ACTIVITY PERMIT, (4) any OTHER SERVICE, (5) any RECORDS, PHOTOGRAPHS or DOCUMENTS, or (6) a HAZARDOUS MATERIALS STORAGE PERMIT. Such fee shall not be refunded upon failure of an applicant to receive the permit. Failure to apply for necessary permits or services may result in an order from the Fire Code Official to obtain a permit or service. Fees are payable upon permit application. Failure to pay for permit, plan review or inspection fees imposed by this fee schedule, within the time period specified, shall render such permit null and void.

EXCEPTION: These permit charges shall not apply to activities of nonprofit Corporations or civic or fraternal organizations that possess an Internal Revenue Service tax exempt status. However, these groups will be assessed plan review and inspection fees.

Standard Hourly Fee: There shall be a standard hourly fee, as established in the appropriate fee table, or one hundred dollars (\$100.00) per hour, whichever is greater, with a one (1) hour minimum, charge for all inspection and plan review work unless specifically exempted. All re-inspections (follow-up inspections) shall be charged at the standard hourly fee with a one (1) hour minimum, unless otherwise specified. All inspections, plan reviews and consultations shall be charged this standard hourly fee, unless otherwise specified. The overtime hourly fee shall be one and one half (1 ½) the standard hourly fee, or as established in an appropriate fee table, when the department is requested to review plans or conduct inspections outside of the normal work day. Overtime charges shall be a minimum of two (2) hours.

Renewable Permit Fees: When an inspection or plan review is conducted by the Fire Prevention Division to ensure proper design, installation or permit compliance, the standard hourly fee for the first hour of inspection or the first hour of plan review, when required, shall be paid at the time of application. Fees for subsequent hours of plan review shall be paid prior to the issuance of a permit. The permit fee shall be in addition to the standard hourly fee in accordance with Section 9-33(a) and Fee Table 27-14(a)~~9-33(a)~~ Renewable Permit Fees: Inspection and Plan Review Fees for Installation.

Installation, Removal or Alterations of Equipment.

When an inspection or plan review is conducted by the ~~Fire-Medical-Department~~ Prevention Division to ensure proper design and installation, the standard hourly fee for the first hour of inspection or the first hour of plan review, when required, shall be paid at the time of application. Fees for subsequent hours of plan review shall be paid prior to the issuance of the permit. Fees for subsequent hours of inspection shall be paid



prior to issuance of a Certificate of Occupancy. All Fees shall be in accordance with Section 9-33(b) and Fee Table 9-33(b)27-14(b).

Inspection or Plan Review Fees for Activity Permits.

General. When an inspection or plan review is conducted by the Fire Prevention Division to ensure proper design, installation or permit compliance, the standard hourly fee for the first hour of inspection or the first hour of plan review, when required, shall be paid at the time of application. Fees for subsequent hours of plan review and inspection shall be paid prior to the issuance of the permit. A separate permit for a specific period of time shall be obtained for each location where such operations are performed. The permit fees shall be in addition to the standard hourly fee in accordance with Table Section 9-33(c) and Fee Table 27-14(c).

Annual Hazardous Materials Storage Permit Fee

The annual fee is based on quantities stored, manufactured, used in process, sold, transported or otherwise utilized in the form of liquids, solids or gases. When there are multiple forms the highest range will be used, as set forth in Table Section 9-33(a) and Fee Table 27-14(a).

(d) Section 105.3.1 Expiration is amended by adding the following:

Operational Permits shall expire one year from the date of issuance unless otherwise noted.

(e) Section 105.6.2 Amusement buildings is amended by adding subsection 105.6.2.1 Temporary Amusement Buildings and shall read as follows ~~with the following new section:~~

Section 105.6.2.1 Temporary Amusement buildings. An operational permit is required to operate a special amusement building for a period of time not to exceed 45 days. Plans shall be submitted to the Fire Prevention Division ~~Medical Department~~ and approved 30 days before the opening of the building or structure to the public.

(f) ~~Section Table 105.6.8 Compressed gases is amended with the following new section and Table 105.6.8 is amended and reads as follows:~~

~~Section 105.6.8 Compressed gases. An operational permit is required for the storage, use or handling at normal temperature and pressure (NTP) of compressed gases in excess of the amounts listed in Table 105.6.8.~~

**TABLE 105.6.8  
PERMIT AMOUNTS FOR COMPRESSED GASES**

| TYPE OF GAS   | AMOUNT<br>(cubic feet at NTP) |
|---|-------------------------------|
| Carbon dioxide used in carbon dioxide enrichment systems                                | 438 (50 lbs.)                 |
| Carbon dioxide used in insulated liquid carbon dioxide beverage dispensing applications | 438 (50 lbs.)                 |
| Corrosive   | 200                           |
| Flammable (except cryogenic fluids and liquefied petroleum gases)                       | 200                           |
| Highly toxic  | Any Amount                    |
| Inert and simple asphyxiant (except carbon dioxide)                                     | 6,000                         |
|   |                               |
| Oxidizing (including oxygen)  | 504                           |
| Pyrophoric  | Any Amount                    |
| Toxic   | Any Amount                    |

(g) Section 105.6.23 Hot Work Operations is amended by adding the following section subsection 105.6.23.1 Temporary Hot Work Permits and shall read as follows:

Section 105.6.23.1 Temporary Hot Work Permits. Operational permits are required to be filled out by the responsible party for the site, structure, occupancy, or property prior to the hot work operation. Hot work permits must be kept on file for 90 days and be made available to the Fire-Medical Department or any other regulatory agency upon request.

(h) Section 105.6.30 Mobile food preparation vehicles is amended by adding the following exception.

Exception: A permit is not required where specifically exempted by State law.

(i) Section 105.6 Required Operational Permits is amended by adding subsection 105.6.51 Required permits.

Section 105.6.51 Required Permits. Any person, corporation, partnership or other entity engaged in the business of design, install, monitor, sell, or service within the City of Peoria shall, obtain a permit from the Prevention Division of the Peoria Fire-Medical Department. The permit application shall include the following: Copy of State and City license and Copy of Certification.

(j) Section 106.5 Refunds is amended by adding the following:

1. A fee (~~Table Section 9-33(d)~~ and Fee Table 27-14(d); Fees for Other Services) shall be assessed to the building owner or business occupancy for the annual inspection and for all re- inspections required to gain compliance with this Code.

i. If a building is occupied by a business occupancy that is different from the owner, then the business occupancy shall be required to pay the assessed inspection fees.

ii. If a building is occupied by the owner or is vacant, then the owner shall be required to pay the assessed inspection fees.

2. If a building is split into multiple occupancies, the inspection fees shall be assessed as follows:

i. Each separate business occupancy that is required to possess and maintain a City of Peoria business license shall be assessed inspection fees based on the square footage of the specified space within the building that has been issued a Certificate of Occupancy for such business. The owner shall not be responsible to pay the inspection fees for any separate business occupancy within the building.

ii. For all portions of a building that are not under the control of separate business occupancies subject to subsection (i), the owner shall be responsible to pay the inspection fees, which shall be calculated by adding together all of the square footage in those portions of the building.

3. A fee will not be charged for additional inspections that the Fire Chief deems necessary throughout the year.

4. The Fire Chief can limit the maximum inspection fee assessed for a facility.

(k) Section 109 Board of Appeals is amended to add subsection 109.4. Administrative appeal and shall read as follows:

Section 109.4 Administrative appeal. Whenever a violation of this code has been found and the applicant wishes to appeal the decision of the staff because the code or the rules legally adopted there under have been incorrectly interpreted or an equivalent method of protection or safety is proposed, an appeal may be filed as follows:

1. The applicant shall file a written appeal, within ten (10) working days after receiving notice of the violation. The applicant shall provide specific information on the basis for the appeal and the relief requested.

2. The appeal shall be filed with the Building Fire Code Official and a copy filed with the Fire Chief. ~~At this time, the applicant may request an informal review before the Fire Code Official.~~

3. ~~If an applicant requests an informal review, the~~ The review will be heard by the Fire Code Official or his designee within 15 working days after the request is filed. The Fire Chief, or an authorized representative, may use a Committee consisting

of such staff as is deemed appropriate to provide advice on a particular request for informal review.

4. ~~The applicant shall provide specific information on the basis for the appeal and the relief requested.~~ If the review upholds the decision of the Fire Code Official, the applicant shall comply with the requirement(s) of the fire code or request a hearing by the Design Review Board, as outlined in Sections 3-17 and 3-18 of the City Code, within ten (10) working days following the informal review as provided in Section 109.3 of this code.

5. ~~—— If the informal review upholds the decision of the Fire Code Official, the applicant shall comply with the requirement(s) of the fire code or request a hearing by the Fire Board of Appeals within ten (10) working days following the informal review as provided in Sec. 108.3 of this code.~~

(l) Section 110.4 Violation penalties is amended and shall read as follows:

~~110.4. Violation penalties.~~

110.4 Violation Penalties. Penalties for violations of this Code are set forth in Peoria City Code, Sections 9-36 through 9-43 and Section 9-48.

(m) Section 110.5 is amended to is added subsection 110.5 Investigation/Inspection fee, and shall read as follows:

110.5 Investigation/Inspection fee. Any person who commences any work on a fire or life safety system before obtaining the necessary permits shall be subject to a fee established by the City Council that shall be in addition to the required permit fees. The Fire Code Official will incur certain cost (i.e.: inspection and administrative time) when investigating/inspecting and citing a person who has commenced work without having obtained a permit. The Fire Code Official is therefore entitled to recover these costs, in addition to that collected when the required permit is issued, to be imposed on the responsible party.

(n) ~~—— Section 202 is amended to include the following additional definitions.~~

~~Section 202 — General Definitions~~

~~The following definitions are hereby added to read as follows:~~

~~**ACCESS GRADES.** Access grades shall include the table set forth in Table 9-33(e).~~

~~**ALL WEATHER SURFACE.** An all-weather surface (AW) is a road surface made up of materials compacted to 90% and capable of supporting vehicles in excess of 75,000 pound gross vehicle weight (GVW) under any weather condition.~~

**COMMERCIAL OCCUPANCY.** A commercial occupancy is any building that falls under the International Building Code (IBC) occupancy classification of A, B, E, F, H, I, M, R1, R-2, R-4, and S.

**DRIVE LENGTH.** Drive Length is measured from the entrance of the drive at the public street to the structure.

**DRIVE WIDTH.** Drive Width is measured from the edges of the designated improved drivable surface. 2-12-2 and 2-16-2, is a 2 foot clear AW surface on both sides of a 12 or 16 foot hard surface drive.

**GRADE.** Grade is the degree of inclination of a slope, road, or other surface (see slope).

**HARD SURFACE.** Hard Surface is a drive surface of concrete, asphalt, or pavers designed to support vehicles in excess of 75,000 pounds GVW under any weather condition.

**HORIZONTAL STANDPIPE.** A horizontal standpipe, also known as a yard hydrant, is a permanent extension of the required firefighting water supply for a building. The horizontal standpipe can be below grade and can be a wet or dry standpipe. The horizontal standpipe is required to be able to supply a minimum of 500 gallons per minute at the outlet. The use of horizontal standpipes must be approved by the Fire Code Official.

**HOSE LAY.** Hose Lay is the extension of a hand held fire hose as it is extended around the perimeter of the structure. If the hose lay is more than 200 feet from the road to all portions of the exterior, an Operational Platform is required.

**INVESTIGATION/INSPECTION FEE.** An investigation/inspection fee is a fee assessed for investigating/inspecting work that has been commenced prior to a permit being issued.

**OPERATION PLATFORM.** Operational Platform is an area located on site where the emergency vehicle is staged while performing emergency medical or firefighting operations. The platform shall be 20 feet by 30 feet with a maximum cross grade of 5 percent. Operational platforms are required when a drive or adjacent street grade is greater than 12% slope or the hose lay from the truck staging area to all portions of the exterior of the structure are greater than 200 feet.

**REPAIR.** Repair of any fire protection equipment is a "like for like" replacement of a component. The component replaced must be from the same manufacturer and be the same model and part number.

**REPLACEMENT.** Replacement of any fire protection system component must be by the same manufacturer, the same model and part number. Replacement of a

~~component by a different manufacturer, model or part number due to obsolescence is—  
considered an upgrade.~~

**~~SLOPE.~~** ~~Slope is the ground, road or other surface that forms a natural or artificial incline. The percentage of slope is determined by dividing the rise by the horizontal run multiplied by 100 [% slope = (Rise/Run) X 100].~~

**~~TEMPORARY USE.~~** ~~Temporary Use is the use of a facility or structure for an agreed upon specified period of time.~~

**~~TURN-A-ROUND.~~** ~~A turn-a-round is required for emergency vehicles when the structure is more than 200 feet from the road. This can be accomplished with a circle drive with an outside radius of 40' 6", T-Type hammer head 16' X 76', or a variation thereof.~~

**~~TURNING RADIUS.~~** ~~A turning radius, for the purpose of this code, defines the required area for fire apparatus movement. Fire apparatus movement is based on the WB-50 turning template as produced by the American Association of State Highway and Transportation Officials (AASHTO).~~

**~~TURN-OUT.~~** ~~A turn-out is required on all extended driveways 300 feet or greater in length to a single residence. A turnout shall widen to 20 feet minimum width over a minimum length of 45 feet.~~

**~~UPGRADE.~~** ~~Upgrade of a fire protection system is anytime a major system component is replaced by a different manufacturer, model or part number due to obsolescence or to expand capacity.~~

(o) ~~Section 308.1.6.3 Sky lanterns is amended and replaced with the following new text:~~

~~A person shall not release or cause to be released a sky lantern, Chinese lantern or other similar device within the City of Peoria.~~

(n) Section 308 Open flame is amended to add subsection 308.2. Wildland/Urban Interface Areas, and shall read as follows:

308.2 Wildland/Urban Interface Areas. Areas considered by the Fire Code Official to be classified as "Wildland/Urban Interface" shall meet the requirements of the 2018 International Urban-Wildland Interface Code.

(o) 308.3.3 2 Theatrical performances is amended by adding the following additional subsections 308.3.2.1 Audience control; 308.3.2.2 Attendant; 308.3.2.3 Fire extinguishers; and 308.3.2.4 Clearance from combustibles:

308.3.3308.3.2.1 Audience control. The audience shall be at least 30 feet away from the closest projection of an open flame device. Audience control shall be

established by use of a physical barrier which can be easily moved or removed in the event of an emergency and shall remain in place throughout the entire performance.

~~308.3.4~~308.3.2.2 Attendant. Performances shall be constantly attended by a person knowledgeable in the use of a fire extinguisher at the rate of at least 1 attendant for every 2 active devices. Attendants shall remain at the performance until all the fire has been extinguished.

~~308.3.5~~308.3.2.3 Fire extinguishers. Adequate fire extinguishing equipment including but not limited to buckets of water, water soaked rags, water extinguishers, charged hose lines, shall be readily available for use during the performance. Portable fire extinguishers shall be provided at a minimum of one 2-A:20-B:C extinguisher for every four simultaneous devices.

~~308.3.6~~308.3.2.4 Clearance from Combustibles. A ~~25-foot~~25-foot clearance from all combustibles shall be maintained in all directions.

(p) Section 401.1 Scope is amended by deleting the exception in its entirety.

(q) Section 403.2 Group A Occupancies is amended to add Section 403.2.5\_ Automatic external defibrillators, which shall read as follows:

~~Section 403.2.5~~ Automatic External Defibrillators (AED). All Public Assembly occupancies with an occupant load of three hundred (300) or greater shall be equipped with AEDs so that they optimally achieves a 3-minute response time from the collapse of a patient to on-scene arrival of the AED with a trained lay rescuer, in accordance with the American Heart Association recommendations and the following conditions:

1. The installations of AEDs are a life safety device and the maintenance of the device shall be the responsibility of the owner of the Certificate of Occupancy.

2. It shall be the responsibility of the owner to obtain and maintain medical oversight from a licensed physician.

3. It shall be the responsibility of the owner to train its employees in Cardio Pulmonary Resuscitation and the use of AEDs in accordance with the Guidelines of the American Heart Association or the Red Cross.

4. Training and equipment maintenance records shall be kept on premises and be available to the ~~fire~~Fire Department upon request.

5. AEDs shall be mounted in an accessible spot free from blocking by storage and equipment. The top of the AED shall be not more than 5 ft. (1.5 m) above the floor. The AED should be easy to reach and remove and should be placed where it will not be damaged, — on hangers or in the brackets supplied by the manufacturer, mounted in cabinets, or placed on shelves.

(r) Section 501.3 Construction Documents is amended by adding subsection 501.3.1 Record electronic files, and which shall read as follows:

~~Section 501.3 Construction Documents. Construction documents for proposed fire apparatus access, location of fire lanes, hydraulic calculations for fire hydrants and construction documents shall be submitted to the Fire-Medical Department for review and approval prior to construction. Upon completion of construction and prior to issue of a Certificate of Occupancy, a copy of finished drawings shall be supplied to the Fire-Medical Department in the following format:~~

501.3.1 Record Electronic Files: Upon completion of construction and prior to issue of Certificate of Occupancy, a copy of finished drawings shall be supplied to the Fire Prevention Division of the Fire-Medical Department in the following format: A copy of the building site plan, fire alarm system, fire sprinkler system shall be provided in Portable Document Format (PDF).

~~(s) Section 501 is amended to add section 501.5 which shall read as follows:~~

~~Section 501.5. Wildland/Urban Interface Areas. Areas considered by the Fire Code Official to be classified as "Wildland/Urban Interface" shall meet the requirements of the 2018 International Urban Wildland Interface Code.~~

~~(aa)~~(s) Section 503.2.7 Grade is amended to read as follows:

Section 503.2.7 Grade. The grade of the fire apparatus access road shall be within the limits established by the Fire Code Official based upon the Fire-Medical Department's apparatus. The maximum grade(s) allowable are:

1. Major Arterials – 9.0%
2. Minor Arterials – 9.0%
3. Couplets – 9.0%
4. Rural/ESL Minor Collectors – 12.0%
5. Local Collectors – 12.0%
6. Local Residential – 15.0%

With the following conditions:

1. All residential and commercial structures where any access grades exceed 10% must be equipped throughout with an automatic fire sprinkler system that meets the requirements of the 2018 International Fire Code and the Peoria Fire Code Amendments.



2. All residential and commercial structures and developments meet the requirements of the 2018 International Urban-Wildland Interface Code (IUWIC)
3. All residential and commercial structures are constructed to the minimum level of Class 1 Ignition Resistant Construction as defined in Section 504 of the 2018 IUWIC.

~~(bb)~~(t) Section 503.3 Marking is amended with the following verbiage and will add subsection 503.3.1 Maintenance, and shall read as follows:

Sec. 503.3 Fire apparatus access roads posting. Every fire apparatus access roadway required under the authority of this section shall be posted with signs readable from either direction of travel and vertically installed at points not more than eighty (80) feet on center along the length of the required fire apparatus access roadway. Fire Lane signs, with indicating arrows, shall be posted at the beginning and end of each fire lane with the indicating arrow pointing in the direction of the fire lane. If the fire lane is intersected by a drive, then a two-way arrow shall be installed at that location.

In lieu of signs the curb can be painted red and marked "NO PARKING FIRE LANE" in four (4) inch white block letters on the vertical face of the curb and spaced eighty (80) feet on center.

Only fire apparatus access roadways required under the authority of this section or as approved by the Fire Chief may be posted or identified as such. Unauthorized use of signs shall be removed.

Sec. 503.3.1 Maintenance. The person(s) in possession of the premises on and into which a fire apparatus access roadway is required shall be solely responsible for the maintenance of such roadways and all required signs. No owner, manager or other person(s) in charge of premises served by a required fire apparatus access roadway shall abandon or close the fire apparatus roadway or any part thereof without permission of the Fire Code Official.

The person(s) in possession of the premises shall be responsible in ensuring that fire apparatus roadways are clear at all times.

~~(cc)~~(u) Section 503.4 Obstruction of Fire Apparatus Roads is amended and shall read as follows:

Sec. 503.4 Obstruction of fire apparatus roads. The required width of any fire apparatus access roadway on City or private property shall not be obstructed in any manner, including the parking or stopping of any vehicle other than an authorized emergency vehicle. A vehicle parked illegally in a fire apparatus access roadway may be removed and impounded under the provisions of the Peoria City Code. An owner or operator of a vehicle parked illegally in a fire apparatus access roadway or the person responsible for any non-vehicular obstruction shall be guilty of a misdemeanor.

~~(dd)~~(v) Section 503.6 Security Gates is amended by ~~is added~~adding subsections 503.6.1 through 503.6.1.11 and shall read as follows:

Sec. 503.6.1 Gate Access (Information and Scale Plans shall be submitted to the Fire-Medical Department for a permit). All gates limiting access will be required to provide emergency Access controls for Fire-Medical Department entry.

503.6.1.1 The gates shall be designed so that the access roadway or turning radius (WB50) shall not be obstructed by the operation of the gate. Minimum set back from the public streets shall be a distance determined by the City Engineer and allow the emergency vehicle the ability to safely operate the lock box or panel. Turning radius from the public street shall be WB50.

503.6.1.2 Clear width of the roadway shall be minimum of twenty (20) feet clear width on all entrances. Exit roadways shall be a minimum of sixteen (16) feet clear width or larger on all exits. Unless otherwise approved by the firedepartment.

503.6.1.3 Sub-divisions may have a divided entrance and exit gates. The entrance side shall have a clearance of twenty (20) feet clear width, the exit side sixteen (16) feet clear width.

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

503.6.1.5 The lock box, padlock or key switch, must be an approved model utilized by the Peoria Fire-Medical Department, which is manufactured by the Knox Company.

503.6.1.6 Traffic Preemption opening device shall be on all motorized gates. Opticom, 3M, Model 722 receiver (no coding model) or compatible shall be used.

503.6.1.7 Gates must open to a clear width of twenty (20) feet within twenty (20) seconds of activation and remain in the open position until closed by operation of the electrical control device.

503.6.1.8 The control pedestal must be identified with a minimum six (6) inch by Ten (10) inch sign with red letters on a white background. This sign must be securely fastened to the pedestal and legible from the approaching vehicle. EMERGENCY FIRE DEPARTMENT ACCESS.

503.6.1.9 Battery back-up for all motorized gates is required, unless the gate fail safe (open) in the event of a power failure.

503.6.1.10 Secondary "Exit Only" gates shall be set up for Fire-Medical

Department emergency access. Exit only gates, which are not motorized, shall be installed per City of Peoria Fire-Medical Department Standard detail. Details are available at the City of Peoria Fire Prevention. Exit only gates shall have a minimum clearance of twenty (20) feet clear width and be posted with a sign that states "Caution Gate Opens Out." The ground shall be painted with a yellow strip showing the depth of the gate swing.

503.6.1.4211 Operation at the gate shall be by pre-emption device or key switch.

~~(ee)~~(w) Section 505.1 Address identification is amended ~~to~~ and shall read as follows:

505.1 Address numbers. 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. Address numbers shall be installed according to the following address display requirements.

1. All address numbers shall be on a contrasting background.
2. No numbers are permitted on glass except suite numbers.
3. All numbers shall be visible from all street frontages.
4. Address numbers located twelve (12) feet and higher as measured from the finished grade shall be a minimum of twelve (12) inches in height.
5. Address numbers located below twelve (12) feet as measured from the finished grade, monument signs and commercial suites shall have a minimum of six (6) inch numbers.
6. Additional address numbers may be required when, in the opinion of the Fire Code Official, emergency response may be delayed due to the physical layout of the building.

~~(ff)~~(x) Section 505 Premises identification is amended by adding subsections 505.3 Address directory; 505.3.1 Specifications; 505.3.2 Dimensions; 505.3.3 Protection; 505.3.4 Illumination; 505.3.5 Installation requirements; 505.3.6 Depiction requirements; 505.3.7 Setback requirements; and 505.3.8 Prohibitions, which shall read as follows:

505.3 Address directory. An approved address directory shall be installed at properties containing one of the following:

1. More than one (1) principal building.

2. Buildings with unit identification numbers.
3. When in the opinion of the Fire Code Official, emergency response may be delayed due to physical layout of the complex.

505.3.1 Specifications. Drawings and/or samples shall be submitted to the Fire-Medical Department for review and approval for all required address directories.

505.3.2 Dimensions. The minimum size for the address directory is to be three (3) feet by three (3) feet. Larger sizes may be required where the site cannot fit on the standard size and still be legible.

505.3.3 Protection. The address directory is to be suitably constructed to be installed outdoors. The graphics shall be protected from vandalism and weather by a clear polycarbonate cover. The cover shall be a minimum of 1/8" thick and sealed to protect the graphics from weather damage.

505.3.4 Illumination. The address directory is to be illuminated internally by a white light. The light shall be sufficient to illuminate the entire site plan with even light. The address directory is to be illuminated from dusk to dawn. The illumination can be turned on and off by an automatic timer or photo cell.

505.3.5 Installation requirements. The address directory is to be installed a minimum of thirty six (36) inches above the finished grade. Larger sizes of address directories can be mounted no lower than twenty four (24) inches when approved by the Fire Code Official. The support post or stanchions are to be set in concrete.

505.3.6 Depiction requirements. The address directory shall depict the site in a clear, easily understood manner from a distance of eight (8) feet. The address directory shall depict structures, building numbers, units, apartment space numbers, tennis courts, swimming pools, driveways, streets, fire hydrants and any other areas as determined by the Fire Code Official. Construction of the address directory shall comply with the following requirements:

1. Address directories shall be a dark print on a contrasting light background.
2. The name and address of the complex are required, but shall not exceed ten (10) percent of the total size of the site directory.
3. Any water areas shall be blue (i.e.: pools, fountains, canals, etc.).
4. Tennis courts shall be green.
5. Fire hydrants shall be a 1/4" diameter black circle filled with a yellow center. The abbreviation "HYD" must be affixed by the location of the hydrant on the directory.

6. The address directory shall be oriented to the viewer with a red symbol, one (1) inch in diameter, with the words "YOU ARE HERE" affixed at the appropriate location of the directory.
7. North must be indicated on the site plan by an arrow no less than three (3) inch in size.
8. The building numbers must be one (1) inch in diameter, located directly adjacent to the building on the driveway side.
9. The colors used on the site directory may not be duplicated to represent more than one (1) item.

505.3.7 Setback requirements. The address directory shall be installed on the occupant's property. A scaled plan shall be submitted showing the proposed location of the address directory, streets, drive aisles, any gate controls and traffic islands.

1. The location of the address directory shall be far enough from the street for the fire apparatus to be safely on the property while reviewing the address directory. The location of the address directory cannot conflict with the traffic visibility zone.
2. No landscape or architectural designs may obstruct the viewing of The address directory.

505.3.8 Prohibitions. No advertising or additional artwork is allowed on the address directory.

~~(gg)~~(y) Section 506.1 titled Where required is amended by adding subsection 506.1.3 which shall read as follows:

~~Section~~ 506.1.3 Locations. Key boxes shall be installed in a location as determined by the Fire Code Official. A full set of keys to open all areas inside and outside the structure, to include the fire alarm panel, shall be placed inside the key box. Key Boxes are to be located no higher than 60 inches above finished grade.

~~(hh)~~(z) Section 507.1 Required water supply is amended to read as follows:

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

projected fire flow will be based on the greatest potential demand posed by any type of occupancy allowed by zoning laws on the projected property.

~~(ii)(aa)~~ Section 507.5.1 titled Where required is amended to read as follows:

Sec. 507.5.1. Where required. Where a portion of a facility or building hereafter constructed or moved into or within the jurisdiction is more than 300 feet (91.5m) from a fire hydrant on a fire apparatus access road, as measured by approved route around the exterior of the facility or building, additional fire hydrants and/or mains shall be provided where required by the Fire Code Official.

Exception:

1. For Group R-3 and Group U Occupancies, the distance requirement shall be 500 feet (122m).

~~(ii)(bb)~~ Section 507.5.2-1. titled Where Required is amended to include the following new subsections 507.5.1.1 required installations; 507.5.1.2 Private fire hydrants; 507.5.1.3 Public fire hydrants; and 507.5.1.4 Fire Hydrants which shall read as follows:

~~507.5.2.1 pertaining to required installations:~~

~~Section 507.5.2.1~~ 1 Required installations. Fire hydrants installed as a result of any order or permit shall be spaced so that short hose lines can be employed and so there are a sufficient number of fire hydrants within a reasonable distance to obtain the required fire flow as determined using Appendix B. In other than single family residential areas, hydrants shall be spaced so that they are not more than 300 feet (91.5m) apart. For single-family residential areas, hydrants shall be spaced so that they are not more than 500 feet (152.5m) apart and not more than 400 feet (122m) hose lay distance from any structure. Hydrant spacing and hose lay requirements may be modified by the Fire Code Official when all structures are protected with automatic fire sprinkler systems in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3

507.5.1.2 Private fire hydrants. All private fire hydrants (those not on the City of Peoria water system and located on private property) must be flushed and maintained annually in accordance with the American Water Works Association, Manual of Water Supply Practices, Installation Field Testing and Maintenance of Fire hydrants, AWWA M17. Selected hydrants, as determined by the Fire Chief, shall be tested to determine Available Fire Flow according to test procedures outlined in the American Water Works Association Manual of Water Supply Practices, Distribution System Requirements for Fire Protection, AWWA M31.

507.5.1.3 Public Fire Hydrants. All public fire hydrants must be flushed and maintained annually in accordance with the American Water Works Association, Manual of Water Supply Practices, Installation Field Testing and Maintenance of Fire hydrants, AWWA M17. Selected hydrants, as determined by the Utilities Director, shall be tested

to determine Available Fire Flow according to test procedures outlined in the American Water Works Association Manual of Water Supply Practices, Distribution System Requirements for Fire Protection, AWWA M31.

507.5.14 Fire Hydrants. All fire hydrants shall be wet barrel as defined by AWWA M17 and specified by the City of Peoria Public Works/Engineering Department. Fire Hydrants used in commercial applications shall have two (2) – 2 ½ inch outlet and one (1) – 4 ½ inch outlet. Fire Hydrants used in residential (R-3) applications shall have one (1) – 2 ½ inch outlet and one (1) – 4 ½ inch outlet.

~~(kk)(cc)~~ Section 507.5.3 ~~pertaining to~~ Private fire service mains and water tanks shall be amended to add requirements 4 through 7 which shall read as follows:

~~507.5.3 Private fire service mains and water tanks. Private fire service mains and water tanks shall be periodically inspected, tested and maintained in accordance with NFPA25 at the following intervals:~~

- ~~1. Private fire hydrants (all types): Inspection annually and after each operation; flow test and maintenance annually.~~
- ~~2. Fire service main piping: Inspection of exposed, annually; flow test every 5 years.~~
- ~~3. Fire service main piping strainers: Inspection and maintenance after each use.~~
4. Fire hydrant systems. Plans and specifications for fire hydrant systems shall be submitted to the Fire-Medical Department for review and approval prior to construction. Plans and specifications for fire hydrant systems shall be submitted to the Fire-Medical Department for review and approval prior to City Council action on the final subdivision plat, or in the case of an individual building or structure, for review and approval prior to issuance of the building permit. The Fire-Medical Department shall obtain the approval of the Engineering Department on the submitted plans and specifications.
5. Each water service provider, whether municipal or private shall submit to the Fire-Medical Department a map identifying the location of fire hydrants within the service area of the water provider. The map required under this subsection shall be submitted on or before December 31, of each year, and shall be updated by the water service provider as new fire hydrants are installed. On May 31, of each subsequent year, a map identifying the location of the fire hydrants within the service area of the water provider shall be submitted to the fire department.

In the event a water service provider fails to submit the map required under subsection (5) of this section, the Fire-Medical Department is

authorized to prepare a map of the fire hydrant locations within the service area of water service provider, and charge the cost of preparation of the map to the water service provider, together with an administrative fee equal to fifteen percent of the cost of preparation of the map.

A water service provider, whether municipal or private having a portion of its service area in which no distribution or service lines are located, shall identify such areas on the map required by this subsection. Such areas shall be exempt from the requirements of Sections 508.1 through 508.4 and Appendix B and C until distribution or service lines are installed by the water service provider.

6. On or before December 31, of each year, each water service provider, whether municipal or private shall have prepared and filed with the City, a plan that: (1) indicates sufficient hydrants on all streets within its water service area containing water utility distribution or service lines to comply with the requirements of International Fire Code, Appendix C-Fire Hydrant Locations and Distribution, including but not limited to Table C105.1 or (2) a five year Capital Improvement Plan indicating plans for the construction of sufficient hydrants on all streets within its water service area containing water utility distribution or service lines to comply with the requirements of International Fire Code, Appendix C- Fire Hydrant Locations and Distribution, including but not limited to Table C105.1 within five (5) years from the date of submission of the plan.

On or before January 10, of each year following submission of the plan, the Fire-Medical Department shall file with the City Clerk, the Directors of Community Development, Utilities Department, Engineering Department and the applicable water provider, a written notice indicating each water service provider who is not in compliance with the requirements of subsection (5) of this section. Upon filing of the written notice with the City Clerk, no building permit shall be issued within the service area of a water service provider who is not in compliance with the requirements of subsection (5) of this section, unless the permit requires an automatic sprinkler system with applicable fire flow requirements complied with to be installed within the structure.

7. A water service provider that believes a notice has been improperly issued under this section may appeal the issuance of the notice to the City Manager, by filing a written notice of appeal to the City Manager within ten (10) days after filing of the Notice in subsection (6) with the City Clerk. The City Manager or his designee shall hold a hearing on the appeal within thirty (30) days after filing of the appeal.

~~(H)~~(dd) Section 511 Fire-Fighters Air Systems is amended and added to Chapter 5 Fire Service Features and shall read as follows:



## Section 511 - FIRE FIGHTERS AIR SYSTEMS.

511.1 Fire Fighters Air Systems. All buildings having floors used for human occupancy located five (5) stories or more above or below the lowest level of fire department vehicular access shall be equipped with an approved rescue air replenishment system. Such systems shall be designed, installed and maintained per the requirements established in Appendix L of this Code.

~~(mm)(ee)~~ Section 901.2 Construction documents is amended by deleting amending Section 901.2.1 in its entirety and adding enacting the following new subsections 901.2.2 Plans for fire alarm systems; 901.2.3 plan certification for fire alarms and occupant notification; 901.2.4 Plan certification for fire sprinkler systems; 901.2.5 Plan certification for all other fire protection systems; and 901.2.6 On-site plans, which shall read as follows:-

~~Sec.~~ 901.2.1 Plans for fire sprinkler systems. Complete plans and hydraulic calculations for fire sprinkler system installations shall be submitted for review and approval prior to beginning installation, modification or alteration. Plans shall be drawn to an indicated scale, on sheets of uniform size and shall show, as a minimum the data required by Chapter 23 of NFPA 13. Water supply data for hydraulic calculations shall be based on the available water supply as determined by flow test information, less a 10 psi safety factor. An additional copy of these plans shall be submitted in an electronic format suitable to the fire department.

901.2.2 Plans for fire alarm systems. Complete plans shall be submitted for review and approval prior to beginning installation, modification or alteration. Plans shall be drawn to an indicated scale, as described by the Arizona Automatic Fire Alarm Association, on sheets of uniform size and shall show, as a minimum, the data required by Chapter 7 of NFPA 72.

901.2.3 Plan Certification for fire alarms and occupant notification. All fire alarm and occupant notification system plans shall be designed by a professional registrant in accordance with the Substantive Policy for Fire Sprinkler and Fire Alarm Systems from the Arizona Board of Technical Registration. Fire alarm installation shop drawings shall bear a review certification of a minimum NICET Level III in Fire Alarms.

901.2.4 Plan certification for fire sprinkler systems. All fire sprinkler system plans shall be designed by a professional registrant in accordance with the Substantive Policy for Fire Sprinkler and Fire Alarm Systems from the Arizona Board of Technical Registration. Fire sprinkler installation shop drawings shall bear a review certification of a minimum NICET Level III in Fire Sprinklers.

901.2.5 Plan certification for all other fire protection systems. Plan certification for all other fire protection systems will be accompanied by a certification of competence when required.

901.2.6 On-Site Plans. Plans and specifications shall be submitted to the Fire-Medical Department for review and approval prior to construction. One set of Fire-Medical Department approved plans shall be maintained on the job site for each inspection.

~~(nn)~~ Section 901.4. Installation is amended to read as follows:

~~901.4 Installation. Fire protection systems shall be maintained in accordance with the original installation standards for that system. Systems shall be extended, altered, or augmented as necessary to maintain and continue protection whenever the building is altered, remodeled or added to. Alterations to fire protection systems shall be done in accordance with current, applicable standards.~~

~~(oo)~~(ff) Section 901.4.6 Pump and riser room size is amended by adding the following subsection 901.4.6.5 Outside Door, which shall read as follows:

901.4.6.5 Outside door. Where provided, fire pump rooms and automatic fire sprinkler riser rooms are to be constructed along an outside wall with direct access through an outside door.

~~(pp)~~(qq) Section 901.6 Inspection, testing and maintenance is amended by adding the following new subsections amending subsection 901.6.3 Testing Records, and adding subsections 901.6.4 Qualifications of Testing Personnel and 901.6.5 Testing which shall read as follows:

901.6.2-~~23~~ Records. All individuals/businesses performing tests, maintenance, or repair on any fire protection system shall forward itemized reports of such work to the Fire Code Official within 30 days of the work performed.

Exception: R3 and ~~R5~~R4 occupancies, not including residential care facilities.

~~Section 901.6.4~~ Qualifications of Testing Personnel. All permitted personnel must meet one or more of the qualifications listed in Section 901.11.2 of these amendments.

~~Section 901.6.3-5~~ Testing. All fire protection systems and fire extinguishers (fire alarms; fire hydrants; fire sprinklers; standpipes; gaseous fire suppression systems and other special types of automatic fire extinguishing systems; basement pipe inlets; and other fire-protection systems and appurtenances) shall be tested annually or as required by nationally recognized standards (i.e., National Fire Protection Association), whichever is more stringent. System test certification shall be retained by the occupant of the building where the system is located and a copy mailed to the Peoria Fire-Medical Department, Fire Prevention Division. These systems shall be inspected, tested and maintained by a contractor holding a current Fire Protection Contractor's permit from the City of Peoria Fire-Medical Department, Fire Prevention Division.

~~(qq)~~(hh) Section 901.7. Systems out of service is amended to read as follows:

901.7 Systems out of service. Where a required fire protection system is out of service, the Fire-Medical Department and the Fire Code Official shall be notified immediately, and where required by the Fire Code Official, the building shall either be evacuated or an approved fire watch shall be provided for all occupants left unprotected by the shut down until the fire protection system has been returned to service.

Where utilized, fire watches shall be provided with at least one approved means for notification of the Fire-Medical Department and their only duty shall be to perform constant patrols of the protected premises and keep watch for fires.

No required fire sprinkler system or fire alarm system shall be placed out of service for more than 8 hours in any one day without written authorization by the fire code official.

~~(rr)~~(ii) Section 901.11 Supervision, is amended and added to Chapter 9 Fire Protection and Life Safety Systems and by adding subsections Section 901.11.2-1 to 901.11.3 are also added under Section 901.11 and shall read as follows:

~~Section—~~901.11.2 Supervision. Each fire protection system installation, modification, or inspection job shall receive “direct supervision” from a “competent on-site person” ~~or persons possessing the following necessary approvals~~ whom shall have in their possession documentation of their qualifications and a picture I.D. These documents must be presented to the Fire Code Official or designated representative upon request.:

~~Section—~~901.11.2-1 For Fire Alarm installation, modification, or inspections one or more of the following are required:

1. National Institute of Certification in Engineering Technology (NICET) fire alarm level II; or
2. Successful completion of Local Exam; or
3. Other certification acceptable to the Fire Code Official.

~~Section—~~901.11.2-2 For Fire Sprinkler System and underground fire line installation, modification, or inspections one or both of the following:

1. National Institute of Certification in Engineering Technology (NICET) fire sprinkler level II; or
2. Successful completion of Local Exam; or

3. Other certification acceptable to the Fire Code Official.

~~Section 901.11.2.3~~ For Fire Special Hazard Fire System installation, modification or inspection for one or more of the following:

1. National Institute of Certification in Engineering Technology (NICET) special hazards suppression systems level II; or
2. Successful completion of Local Exam; or
3. Other certification acceptable to the Fire Code Official.

~~Section 901.11.2.4~~ The “competent on-site person” shall have in their possession documentation of their qualifications and a picture I.D. These documents must be presented to the Fire Code Official or designated representative upon request.

~~(ss)~~(jj) Section 903.2. titled Where required is amended to read as follows:

Sec. 903.2 All commercial occupancies for which a building or construction permit is obtained shall be equipped throughout the entire structure with a fully automatic sprinkler system meeting the requirements of NFPA 13.

EXCEPTION: The exception in this section is to be numbered as subsection 1 and the following subsections are to be added:

2. Unattached outer buildings two-hundred (200) square feet or less do not require fire sprinklers. Unattached outer buildings of two hundred (200) square feet or less shall be located three (3) feet or more from any structure on the property.

3. Vehicle parking, gasoline dispensing island canopies and porte cocheres not attached to and at least three (3) feet or more from any structure.

4. Public restrooms associated with parks, playgrounds and golf courses provided all of the following items are met:

i. The structure is to be of Type I fire resistive construction as defined in the *International Building Code*.

ii. The structure shall be limited to a maximum of six hundred twenty five (625) square feet.

iii. No combustible material shall be used or stored in the structure.

iv. This is to include light fixtures and any other construction material. No storage of landscape material or other park equipment, such as lawn mowers, gasoline, fertilizers, etc. shall be permitted within the structure with the exception of restroom supplies in quantities sufficient to support only the needs of the structure.

v. No other structures are to be built within one hundred (100) feet of the exempted restrooms.

vi. No additions to or modifications changing the buildings use or character shall be permitted without requiring a full fire suppression system being installed.

5. Temporary use buildings (i.e.: construction trailers, sales trailers, etc.) as approved by the Fire Code Official.

~~(tt)~~(kk) Section 903.2.2-3 is amended to read as follows:

Sec. 903.2.2-3 Group E. An automatic fire sprinkler system shall be provided throughout all Group E Occupancies.

~~(uu)~~(ll) Section 903.2.8, "Group R," is amended by adding the following subsections which shall read as follows:

903.2.8.1 Group R 3, ~~Division 2~~ 3 Occupancies is amended by adding the following subsections:-

903.2.8.1.1 New Construction: All new Group R 3, ~~Division 2~~ occupancies shall be required to install a residential fire sprinkler system for the FIRE AREA of the building. If any portion of a patio has livable space directly above the patio, the patio shall have sprinkler protection below the livable space.

903.2.8.1.2 Remodeling: If an existing Group R 3, ~~Division 2~~ occupancy requires a City permit to modify the structure, then the existing and new portions of the occupancy shall be required to have a residential fire sprinkler system if any one or more of the following conditions exist:

903.2.8.1.2.1 The FIRE AREA square footage of the building, including the remodel, is five thousand (5,000) square feet or greater.

903.2.8.1.2.2 Fire flows to the entire building cannot be met in accordance with Appendix B Fire Flow Requirements For Buildings and Table B105.1 Minimum Required Fire Flow and Flow Duration For Buildings.

903.2.8.1.2.3 The occupancy is not connected to a public or public service corporation water system.

903.2.8.2 Group R 4, Condition 1, ~~3~~ 3 ~~Division 3~~ Occupancies is amended by adding subsections 903.2.8.2.1.

903.2.8.2.1 Group R 4, Condition 1 ~~Division 3~~ Occupancies South of and immediately adjacent to the centerline of Dixileta Road alignment and East of the Agua Fria River. In any new Group R 4, Condition 1 ~~Division 3~~ occupancies located South of

the Dixileta Road alignment and East of the Agua Fria River alignment where the FIRE AREA square footage of the building is five thousand (5000) square feet or greater, an automatic sprinkler system shall be installed throughout the building.

Exception: Residential sprinklers shall be permitted to be omitted from such occupancies if both of the following conditions are met: (1) the FIRE AREA square footage is less than five thousand (5000) square feet, and (2) the required fire flows are met in accordance with Appendix B Fire Flow Requirements For Buildings and Table B105.1 Minimum Required Fire Flow and Flow Duration For Buildings. If the fire flows cannot be met, a residential sprinkler system shall be installed.

903.2.8.2.1.1 Remodeling: If an existing occupancy is to be changed by the enclosure of existing patios, porches, entry ways, or by the addition of new enclosed space which increases the total square footage of the Fire Area as defined in this Code to Five Thousand (5,000) square feet or greater, then this requirement shall apply.

903.2.8.2.1.2 Livable Space Above Patios: If a residence has sprinkler protection and any portion of a patio has livable space directly above the patio, the patio shall have sprinkler protection below the livable space.

Exception: FIRE AREA shall exclude covered unenclosed patios if there is no livable space directly above.

903.2.8.2.1.3 Home Buyer Option: In any new Group R\_4, Condition 1 ~~Division 3~~ occupancies located South of the Dixileta Road alignment and East of the Agua Fria River alignment, each builder, contractor or developer shall offer to each home buyer as an option, at the time of purchase, a residential fire sprinklersystem.

903.2.8.2.1.3.1 The option shall include a competitive cost of installing an automatic fire sprinkler system equipped with residential fire sprinkler heads for the FIRE AREA of the structure. This option is to be included on the development list of options.

903.2.8.2.1.3.2 The builder, contractor or developer shall provide to each home buyer a copy of educational materials prepared by the City on residential fire sprinkler systems with each model price list.

903.2.8.2.1.3.3 A signed affidavit, using a form approved by the Peoria Fire-Medical Department, by the buyer indicating that this option was offered shall be retained by the developer at his home office, available for inspection by the City for a period of one (1) year from the time of closure of the residence.

903.2.8.2.2 Group R\_4, Condition 1 ~~Division 3~~ Occupancies North of and immediately adjacent to the centerline of Dixileta Road Alignment and West of the Agua Fria River.

903.2.8.2.2.1 New Construction: In all new Group R 4, Condition 1 ~~Division 3~~ occupancies located North of the Dixileta Road alignment and West of the Agua Fria River alignment, an automatic sprinkler system shall be installed throughout the building.

903.2.8.2.2.2 Remodeling: If an existing Group R 4, Condition 1 ~~Division 3~~ occupancy located North of the Dixileta Road alignment and West of the Agua Fria River alignment requires a City permit to modify the structure, then the existing and new portions of the occupancy shall be required to have a residential fire sprinkler system if any one or more of the following conditions exist:

903.2.8.2.2.2.1 The FIRE AREA square footage of the building, including the remodel, is five thousand (5,000) square feet or greater.

903.2.8.2.2.2.2 Fire flows to the entire building cannot be met in accordance with Appendix B Fire Flow Requirements For Buildings and Table B105.1 Minimum Required Fire Flow and Flow Duration For Buildings.

903.2.8.2.2.2.3 The occupancy is not connected to a public or public service corporation water system.

903.2.8.2.3 Wildland/Urban Interface. In Group R 4, Condition 1 ~~Division 3~~ occupancies in areas that are classified by the code official as Wildland/Urban Interface, if an occupancy has a private or shared drives leading to one or more single family dwelling, the occupancy shall be required to install a residential fire sprinkler system for the FIRE AREA of the building.

903.2.8.2.4 Water Supply. In Group R 4, Condition 1 ~~Division 3~~ occupancies that are new or require a City permit to modify the structure, regardless of location, if they are not connected to a public or public service corporation water system and are on a private well, an automatic sprinkler system shall be installed throughout the building. If any portion of a patio has livable space directly above the patio, the patio shall have sprinkler protection below the livable space.

### 903.2.8.3 Group R, Division 4, condition 2 Occupancies.

903.2.8.3.1 New Construction: All new Group R ~~Division 4, Condition 2~~ occupancies licensed by the Arizona Department of Health Services for more than five (5) residents or day care shall be required to install a residential fire sprinkler system for the FIRE AREA of the building. If any portion of a patio has livable space directly above the patio, the patio shall have sprinkler protection below the livablespace.

903.2.8.3.2 Remodeling: If an existing Group R ~~Division 4, Condition 2~~ occupancy that is licensed by the Arizona Department of Health Services for more than five (5) residents or day care requires a City permit to modify the structure, then the existing and new portions of the occupancy shall be required to have a residential fire sprinkler system.

~~903.2.8.4 Urban-Wildland Interface Area. All Group R Occupancies in an Urban-Wildland Interface Area shall comply with the 2018 International Urban-Wildland Interface Code and the following:~~

~~Definitions: See Section 202 for definitions.~~

~~903.2.8.4.1 Determination of Requirements: To determine specific fire service feature requirements for Urban Wildland Interface areas based upon access grades to the structure or parcel, Table 9-33(d) shall be used.~~

(mm) Section 903.2.8, Group R, is amended by adding subsections 903.2.8.5 to 903.2.8.5.5 which shall read as follows:

903.2.8.5 Group R2 Occupancies.

903.2.8.5.1 New Construction: All new Group R, 2 occupancies shall be required to install a residential fire sprinkler system for the FIRE AREA of the building. If any portion of a patio has livable space directly above the patio, the patio shall have sprinkler protection below the livable space.

903.2.8.5.2 Remodeling: If an existing Group R, 2 occupancy requires a City permit to modify the structure, then the existing and new portions of the occupancy shall be required to have a residential fire sprinkler system if any one or more of the following conditions exist:

903.2.8.5.3 The FIRE AREA square footage of the building, including the remodel, is five thousand (5,000) square feet or greater.

903.2.8.5.4 Fire flows to the entire building cannot be met in accordance with Appendix B Fire Flow Requirements For Buildings and Table B105.1 Minimum Required Fire Flow and Flow Duration For Buildings.

903.2.8.5.5 The occupancy is not connected to a public or public service corporation water system.

903.2.8.6 Urban-Wildland Interface Area. All Group R Occupancies in an Urban-Wildland Interface Area shall comply with the 2018 International Urban-Wildland Interface Code and the following

903.2.8.6.1 Determination of Requirements: To determine specific fire service feature requirements for Urban Wildland Interface areas based upon access grades to the structure or parcel, Table 9-33(d) shall be used.

(vv)(nn)Section 903.3 Installation Requirements, is amended to add the following subsections 903.3.1.3.1 Garage Coverage and 903.3.9 Identification of sprinkler system



capabilities and limitations, and shall read as follows:

903.3.1.3.1 Garage Coverage. Where an automatic fire sprinkler system is required to be installed in a one and two family dwelling, Group R-3, Group R-4 or townhouse by other sections of this code, any attached garage shall be provided with fire sprinkler coverage. Coverage shall be based on a two head flowing calculation and shall use intermediate temperature fire sprinkler heads.

903.3.7 9 Identification of sprinkler system capabilities and limitations. An adhesive 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. When sprinkler risers are located outside of the building, the sign shall be stamped metal. The minimum sign dimension is 6- inches high by 4 inches 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 the 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, Section 12.7 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. Commodities that can be protected by the automatic sprinkler system.
8. Commodities that cannot be protected by the automatic sprinklersystem.
9. Limits on storage heights of idle wood and plasticstorage.
10. Limits on storage heights of miscellaneous Group A plastic, tire and rolled paper storage.
11. Locations where in-rack sprinklers are required.
12. Locations where horizontal and/or vertical barriers arerequired.
13. Information explaining the manufacturer, sprinkler identification number, k-factor, and operating temperature of the overhead sprinklers protecting

the high pile storage.

(~~www~~) Section 903 is amended by adding the following section:

Section 903.3.1.3.1 Garage coverage. Where an automatic fire sprinkler system is required to be installed in a one and two family dwelling, Group R-3, Group R-4 or townhouse by other sections of this code, any attached garage shall be provided with fire sprinkler coverage. Coverage shall be based on a two head flowing calculation and shall use intermediate temperature fire sprinkler heads.

(~~xx~~) ~~Section 903.4.1. Monitoring, is amended to read as follows:~~

~~903.4.1 Signals. Alarm, supervisory and trouble signals shall be distinctly different and shall be automatically transmitted to an Underwriters Laboratory listed or Factory Mutual approved central station, remote supervising station, or proprietary supervising station as defined in NFPA 72. As an alternative, when approved by the Fire Code Official, such signals shall sound an audible signal at a constantly attended location.~~

Exceptions:

- ~~1. Underground key or hub valves in roadway boxes provided by the municipality or public utility are not required to be monitored.~~
- ~~2. Backflow prevention device test valves, located in the limited area sprinkler system supply piping, shall be locked in the open position. In occupancies required to be equipped with a fire alarm system, the backflow preventer valves shall be electrically supervised by a tamper switch installed in accordance with NFPA 72 and separately annunciated.~~

(~~yy~~)(pp) Section 906.1 is amended by repealing the exception in its entirety.

(~~zz~~)(qq) Section 906.2 is amended by repealing the exception in its entirety.

(~~aaa~~)(rr) Section 907.2. titled Where required-new buildings and structures is amended to read as follows:

Section 907.2. Where required-new buildings and structures. An approved fire alarm system installed in accordance with the provisions of this code and NFPA 72 shall be provided in all new buildings and structures and in accordance with Sections 907.2.1 through 907.2.23 and provide occupant notification in accordance with Section 907.5, unless other requirements are provided by another section of this code, whichever is more stringent.

Where automatic fire detectors are required, they shall be smoke detectors, except that an approved alternative type of detector shall be installed in spaces such as boiler rooms, where, during normal operation, products of combustion are present in

sufficient quantity to actuate a smoke detector.

A minimum of one manual fire alarm box shall be provided in an approved location to initiate a fire alarm signal for fire alarm systems employing automatic fire detectors or water-flow detection devices. Where other sections of this code allow elimination of fire alarm boxes due to sprinklers, a single fire alarm box shall be installed.

Exceptions:

1. The manual fire alarm box is not required for fire alarm systems dedicated to elevator recall control and supervisory service.
2. The manual fire alarm box is not required for Group R-2 occupancies unless required by the Fire Code Official to provide a means for fire watch personnel to initiate an alarm during a sprinkler system impairment event. Where provided, the manual fire alarm box shall not be located in an area that is accessible to the public.

~~(bbb)~~(ss) Section ~~4030.3.1~~1031.3 Obstructions is amended by adding the following subsections ~~4030.3.4~~1031.3.2 and ~~4030.3.2~~1031.3.3 which shall read as follows:

~~4030.3.4~~1031.3.2 The required width of a means of egress is defined as the total width of the corridor, exit, exit access, and exit discharge that was designed in the structure or building when it was constructed.

~~4030.3.2~~1031.3.3 Storage in any part of a means of egress, corridor, exit, exit access, or exit discharge is prohibited.

~~(ccc)~~(tt) Section 1103.5 Sprinkler systems. is hereby amended and shall read as follows:

1103.5 ~~Sprinkler systems.~~ An automatic fire sprinkler system shall be provided in existing buildings in accordance with Sections 1103.5.1, 1103.5.2 and Table 1103.5.1 if the square footage requirements of Table 1103.5.1 are met by either a change in use or an increase in the total square footage.

EXCEPTION:

1. Spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1 hour fire barriers constructed in accordance with Section 707 of the International Building Code or not less than 2 hour horizontal assemblies constructed in accordance with

Section 712 of the International Building Code or both.

2. Unattached outer buildings two-hundred (200) square feet or less do not require fire sprinklers. Unattached outer buildings of two hundred (200) square feet or less shall be located three (3) feet or more from any structure on the property.
3. Vehicle parking, gasoline dispensing island canopies, and porte cocheres not attached to and at least three (3) feet from the buildings shall.
4. Public restrooms associated with parks, playgrounds and golf courses, provided all of the following items are met:
  - i. The structure is to be of Type I Fire Resistive construction as defined in the *International Building Code*.
  - ii. The structure shall be limited to a maximum of six hundred twenty five (625) square feet.
  - iii. No combustible material shall be used or stored in the structure; this is to include light fixtures and any other construction material. No storage of landscape material or other park equipment, such as lawn mowers, gasoline, fertilizers, etc. shall be permitted within the structure, with the exception of restroom supplies, in quantities sufficient to support only the needs of the structure.
  - iv. No other structures are to be built within one hundred (100) feet of the exempted restrooms.
  - v. No additions to or modifications changing the buildings use or character shall be permitted without requiring a full suppression system being installed.
5. Temporary use buildings (i.e.: construction trailers, sales trailers, etc.) as approved by the Fire Code Official.

**TABLE 1103.5.1  
FIRE SPRINKLER REQUIREMENTS WITH CHANGE OF OCCUPANCY OR BUILDING  
INCREASE EXISTING NON-SPRINKLERED BUILDINGS**

|                    |     | Proposed Final Occupancy |       |        |        |       |        |        |        |        |        |                       |                       |        |                   |       |     |        |        |
|--------------------|-----|--------------------------|-------|--------|--------|-------|--------|--------|--------|--------|--------|-----------------------|-----------------------|--------|-------------------|-------|-----|--------|--------|
| Existing Occupancy |     | Occupancy                | A-1   | A-2    | A-3    | A-4   | A-5    | B(10)  | E      | F-1    | F-2    | H-1<br>through<br>H-5 | I-1<br>through<br>I-4 | M      | R-1<br>And<br>R-2 | R-3   | R-4 | S-1    | S-2(8) |
|                    |     |                          |       |        |        |       |        |        |        |        |        |                       |                       |        |                   |       |     |        |        |
| Hazard Level 1     | A-1 | 12,000                   | 5,000 | 12,000 | 12,000 | 1,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 0                     | 0                     | 12,000 | 0                 | NP    | 0   | 12,000 | 12,000 |
|                    | A-2 | 12,000                   | 5,000 | 12,000 | 12,000 | 1,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 0                     | 0                     | 12,000 | 0                 | NP    | 0   | 12,000 | 12,000 |
|                    | A-3 | 12,000                   | 5,000 | 12,000 | 12,000 | 1,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 0                     | 0                     | 12,000 | 0                 | NP    | 0   | 12,000 | 12,000 |
|                    | A-4 | 12,000                   | 5,000 | 12,000 | 12,000 | 1,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 0                     | 0                     | 12,000 | 0                 | NP    | 0   | 12,000 | 12,000 |
|                    | A-5 | 12,000                   | 5,000 | 12,000 | 12,000 | 1,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 0                     | 0                     | 12,000 | 0                 | NP    | 0   | 12,000 | 12,000 |
|                    | H-1 | 12,000                   | 5,000 | 12,000 | 12,000 | 1,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 0                     | 0                     | 12,000 | 0                 | NP    | 0   | 12,000 | 12,000 |
|                    | H-2 | 12,000                   | 5,000 | 12,000 | 12,000 | 1,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 0                     | 0                     | 12,000 | 0                 | NP    | 0   | 12,000 | 12,000 |
|                    | H-3 | 12,000                   | 5,000 | 12,000 | 12,000 | 1,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 0                     | 0                     | 12,000 | 0                 | NP    | 0   | 12,000 | 12,000 |
|                    | H-4 | 12,000                   | 5,000 | 12,000 | 12,000 | 1,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 0                     | 0                     | 12,000 | 0                 | NP    | 0   | 12,000 | 12,000 |
|                    | H-5 | 12,000                   | 5,000 | 12,000 | 12,000 | 1,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 0                     | 0                     | 12,000 | 0                 | NP    | 0   | 12,000 | 12,000 |
|                    | I-1 | 12,000                   | 5,000 | 12,000 | 12,000 | 1,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 0                     | 0                     | 12,000 | 0                 | NP    | 0   | 12,000 | 12,000 |
|                    | I-2 | 12,000                   | 5,000 | 12,000 | 12,000 | 1,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 0                     | 0                     | 12,000 | 0                 | NP    | 0   | 12,000 | 12,000 |
|                    | I-3 | 12,000                   | 5,000 | 12,000 | 12,000 | 1,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 0                     | 0                     | 12,000 | 0                 | NP    | 0   | 12,000 | 12,000 |
|                    | I-4 | 12,000                   | 5,000 | 12,000 | 12,000 | 1,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 0                     | 0                     | 12,000 | 0                 | NP    | 0   | 12,000 | 12,000 |
|                    | R-1 | 12,000                   | 5,000 | 12,000 | 12,000 | 1,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 0                     | 0                     | 12,000 | 0                 | NP    | 0   | 12,000 | 12,000 |
|                    | R-2 | 12,000                   | 5,000 | 12,000 | 12,000 | 1,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 0                     | 0                     | 12,000 | 0                 | NP    | 0   | 12,000 | 12,000 |
| Hazard Level 2     | R-3 | 12,000                   | 5,000 | 12,000 | 12,000 | 1,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 0                     | 0                     | 12,000 | 0                 | 5,000 | 0   | 12,000 | 12,000 |
|                    | R-4 | 12,000                   | 5,000 | 12,000 | 12,000 | 1,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 0                     | 0                     | 12,000 | 0                 | NP    | 0   | 12,000 | 12,000 |
| Hazard Level 3     | F-1 | 12,000                   | 5,000 | 12,000 | 12,000 | 1,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 0                     | 0                     | 12,000 | 0                 | NP    | 0   | 12,000 | 12,000 |
|                    | S-1 | 12,000                   | 5,000 | 12,000 | 12,000 | 1,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 0                     | 0                     | 12,000 | 0                 | NP    | 0   | 12,000 | 12,000 |
| Hazard Level 4     | E   | 12,000                   | 5,000 | 12,000 | 12,000 | 1,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 0                     | 0                     | 12,000 | 0                 | NP    | 0   | 12,000 | 12,000 |
|                    | F-2 | 12,000                   | 5,000 | 12,000 | 12,000 | 1,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 0                     | 0                     | 12,000 | 0                 | NP    | 0   | 12,000 | 12,000 |
| Hazard Level 4     | S-2 | 12,000                   | 5,000 | 12,000 | 12,000 | 1,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 0                     | 0                     | 12,000 | 0                 | NP    | 0   | 12,000 | 12,000 |
|                    | B   | 12,000                   | 5,000 | 12,000 | 12,000 | 1,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 0                     | 0                     | 12,000 | 0                 | NP    | 0   | 12,000 | 12,000 |
| Hazard Level 4     | M   | 12,000                   | 5,000 | 12,000 | 12,000 | 1,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 0                     | 0                     | 12,000 | 0                 | NP    | 0   | 12,000 | 12,000 |

**Footnotes:**

- The top row is the proposed final occupancy for the building and/or suite.
- The left column is the existing occupancy to be changed from.
- If the new occupancy square footage exceeds the limits shown, a fire sprinkler system is required to be installed throughout the entire building.
- For multi-tenant buildings, occupancy requirements for the fire sprinkler system shall be based on the highest Hazard Level occupancy in use in the structure.
- Only one (1) change in occupancy or increase in the building square footage is allowed. The 2<sup>nd</sup> change in occupancy or increase in the building square footage shall require the installation of a fire sprinkler system throughout the entire building.
- NP = Not Permitted.
- Hazard Level 1 is the highest fire hazard rating and Hazard Level 4 is the lowest fire hazard rating.
- Any change in occupancy to, or increase in, the square footage for a Group S-2 enclosed parking garage will require an automatic fire sprinkler system to be installed.
- Occupancies with a Fire Barrier constructed per *International Building Code (IBC)*, section 706 requirements can be considered as separate fire areas.
- Ambulatory Care Facilities are required to be provided with an automatic fire sprinkler system regardless of the square footage (zero square footage).

(uu) Section 1201.1 Scope is amended to read as follows:

1201.1 Scope. The provisions of this chapter shall apply to the installation, operation and maintenance of energy systems used for generating or storing energy. It shall not apply to equipment associated with the generation, control, transformation, transmission, or distribution of energy installations that is under the exclusive control of an electric utility or lawfully designated agency.

(vv) Section 1203.1.1 Stationary generators is amended to read as follows:

1203.1.1 Stationary generators. Stationary emergency and standby power generators required by this code shall be listed in accordance with UL 2200. Associated flammable or combustible liquid tanks shall also comply with Chapters 50 and 57.

(ww) Section 1203.2 titled Where required is amended to add subsection 1203.2.19 and shall read as follows:

1203.2 Where required. Emergency and standby power systems shall be provided where required by Sections 1203.2.1 through 1203.2.19.

1203.2.19 Connected facilities. Power and lighting facilities for the fire command center and elevators specified in Sections 403.4.8.2 and 403.6 of the International Building Code, as applicable, and electrically powered fire pumps required to maintain pressure, shall be transferable to the standby source. Standby power shall be provided for at least one elevator to serve all floors and be transferable to any elevator.

(xx) Section 1203.3 Critical circuits is amended to read as follows:

1203.3 Critical circuits. Cables used for survivability of required critical circuits shall be listed in accordance with UL 2196. Electrical circuit protective systems shall be installed in accordance with their listing requirements.

(yy) Section 1204.1 General is amended to add subsection 1204.1.1 Permits, 1204.1.2 Marking, 1204.1.2.1 Materials, 1204.1.2.2 Marking content, 1204.1.2.3 Main service disconnect and 1204.1.3 Location of Marking to read as follows:

1204.1.1 Permits. Permits shall be obtained for solar voltaic systems in accordance with Section 105.7.21

1204.1.2 Marking. Marking is required on interior and exterior direct-current (DC) conduit, enclosures, race-ways, cable assemblies, junction boxes, combiner boxes and disconnects.

1204.1.2.1 Materials. The materials used for marking shall be reflective, weather resistant and suitable for the environment. Marking as required in Sections 1204.1.2 through 1204.1.6 shall have all letters capitalized with a minimum height of 3/8 inch (9.5

mm) white on red background.

1204.1.2.2 Marking content. The marking shall contain the words “WARNING: PHOTOVOLTAIC POWER SOURCE.”

1204.1.2.3 Main service disconnect. The marking shall be placed adjacent to the main service disconnect in a location clearly visible from the location where the disconnect is operated.

1204.1.3 Location of marking. Marking shall be placed on interior and exterior DC conduit, raceways, enclosures and cable assemblies every 10 feet (3048 mm), within 1 foot (305 mm) of turns or bends and within 1 foot (305 mm) above and below penetrations of roof/ceiling assemblies, walls or barriers.

(zz) Section 1204.2 Access and pathways is amended to read as follows:

1204.2 Access and pathways. Roof access, pathways, and spacing requirements shall be provided in accordance with Sections 1204.2.1 through 1204.3.3. Pathways shall be over areas capable of supporting fire fighters accessing the roof. Pathways shall be located in areas with minimal obstructions, such as vent pipes, conduit or mechanical equipment. Residential structures shall be designed so that each photovoltaic array is no greater than 150 feet (45 720 mm) by 150 feet (45 720 mm) in either axis.

Exceptions:

1. Detached, non-habitable Group U structures including, but not limited to, detached garages serving Group R-3 buildings, parking shade structures, carports, solar trellises and similar structures.

1204.2.1 Solar photovoltaic systems for Group R-3 buildings is amended by amending 1204.2.1.1, 1204.2.1.2 and 1204.2.1.3 and amended to add subsections 1204.2.1.4 Residential buildings with roof hips and valleys, 1204.2.1.5 Residential building smoke ventilation:

Section 1204.2.1.1 Pathways to ridge is amended to read as follows:

1204.2.1.1 Roof access points. Roof access points shall be located in areas that do not require the placement of ground ladders over openings such as windows or doors and located at strong points of building construction in locations where the access point does not conflict with overhead obstructions such as tree limbs, wires, or signs.

Section 1204.2.1.2 Setbacks at ridge is amended to read as follows:

1204.2.1.2 Residential buildings with hip roof layouts. Panels/modules installed on residential buildings with hip roof layouts shall be located in a manner that provides two 3- foot-wide (914 mm) access pathway from the eave to the ridge on each roof slope where panels or modules are located.

Section 1204.2.1.3 Alternative setbacks at ridge is amended to read as follows:

1204.2.1.3 Residential buildings with a single ridge. Panels/modules installed on residential buildings with a single ridge shall be located in a manner that provides two, 3-foot-wide (914 mm) access pathways from the eave to the ridge on each roof slope where panels/modules are located.

1204.2.1.4 Residential buildings with roof hips and valleys. Panels/modules installed on residential buildings with roof hips and valleys shall be located no closer than 18 inches (457 mm) to a hip or a valley where panels/modules are to be placed on both sides of a hip or valley. Where panels are to be located on only one side of a hip or valley that is of equal length, the panels shall be permitted to be placed directly adjacent to the hip or valley.

1204.2.1.5 Residential building smoke ventilation. Panels/modules installed on residential buildings shall be located no higher than 3 feet (914 mm) below the ridge in order to allow for fire department smoke ventilation operations.

(aaa) Section 1204.3, Other than Group R-3 buildings, is amended as follows:

Section 1204.3.2 Interior pathways is amended by adding requirement 4 and 5 and shall read:

4. The pathway shall be over areas capable of supporting the live load of fire fighters accessing the roof.
5. The centerline axis pathways shall be provided in both axes of the roof. Centerline axis pathways shall run where the roof structure is capable of supporting the live load of fire fighters accessing the roof.

Section 1204.3.3 Smoke ventilation is amended to add requirement 3 and shall read:

3. Arrays shall be no greater than 150 feet (45 720 mm) by 150 feet (45 720 mm) in distance in either axis in order to create opportunities for fire department smoke ventilation operations.

(bbb) Section 1206.1 Scope is amended to read as follows:

1206.1 Scope. The provisions in this section are applicable to energy storage systems designed to provide electrical power to a building or facility. These systems are used to provide standby or emergency power, an uninterruptable power supply, load shedding, load sharing or similar capabilities. Energy storage system in Group R-3 and R-4 occupancies shall be in accordance with 1206.2.1 and 1206.4. Approved signage is required for all installations.

(ccc) Section 1206.2 Stationary storage battery systems is amended to read as follows:



1206.2 Stationary storage battery systems. Stationary storage battery systems having capacities exceeding the values shown in Table 1206.2 shall comply with Section 1206.2.1 through 1206.2.13.6, as applicable. Approved signage is required for all installations.

Section 1206.2.1 Permits is amended to read as follows:

1206.2.1 Permits. Permits shall be obtained for the construction and operation of stationary storage battery systems with a capacity of more than 3 kWh in accordance with Section 105.7.2.

Section 1206.2.3 Hazard mitigation analysis is amended to add condition 4, and shall read as follows:

4. When required by the fire code official.

Section 1206.2.3.1 Fault condition is amended to add fault condition 8, and shall read as follows:

8. Failure of temperature control.

Section 1206.2.3.2 Analysis approval, is amended by changing requirement 4 to read as follows:

4. Flammable gases released from batteries during charging, discharging and normal operation shall not exceed 10 percent of their lower flammability limit (LFL).

Section 1206.2.3 Hazard mitigation analysis is amended to add subsection 1206.2.3.4 Large scale fire testing, 1206.2.3.5 Fire remediation, 1206.2.3.6 Forensic analysis and shall read as follows:

1206.2.3.4 Large scale fire testing. Where required in section 1206, large scale fire testing shall be conducted on a representative stationary storage battery system in accordance with UL 9540A. The testing shall be conducted or witnessed and reported by an approved testing laboratory. The test report shall be provided to the fire code official for review and approval in accordance with Section 104.7.2.

1206.2.3.5 Fire remediation. Where a fire or other event has damaged a stationary storage battery system and ignition or re-ignition of the stationary storage battery system is possible, the fire code official may require the system owner, agent, or lessee, take actions, at their expense, to mitigate the hazard or remove the damaged equipment from the premise to a safe location.

1206.2.3.6 Forensic analysis. The fire code official may also require a forensic analysis of the cause of failure by an independent laboratory approved by the fire code official in accordance with Section 104.10.2.

Section 1206.2.8.1 Location Exceptions, are amended to read as follows:

Exceptions:

1. Lead acid and nickel cadmium stationary storage battery systems less than 50 VAC and 60 VDC installed in facilities under the exclusive control of communications utilities in accordance with NFPA 76.
2. Where approved, installations shall be permitted in underground vaults complying with NFPA 70, Article 450, Part III.
3. Where approved by the fire code official, installations shall be permitted on higher and lower floors.
4. Installations on noncombustible rooftops of buildings exceeding 75 feet (22 860 mm) in height that do not obstruct fire department rooftop operations, where approved by the fire code official.

Section 1206.2.8.3 Stationary battery arrays is amended for exception 2 to read as follows:

1206.2.8.3 Stationary battery arrays:

Exceptions:

2. Listed pre-engineered stationary storage battery systems and prepackaged stationary storage battery systems shall not exceed 250 kWh (900 mega-joules) each, where approved by the fire code official.

Section 1206.2.8.6 Signage is amended to read as follows:

1206.2.8.6 Signage. Approved signs shall be provided on or adjacent to all entry doors or in locations near entrances to stationary storage battery system rooms battery storage rooms or areas and on enclosures of battery storage cabinets and walk-in units located outdoors, on rooftops or in open parking garages. Signs designed to meet both the requirements of this section and NFPA 70 shall be permitted. The signage and shall include the following or equivalent:

1. "Energy Storage System", "Battery Storage System", "Capacitor Energy Storage System", or the equivalent.
2. The identification of the electrochemical battery energy storage system technology present. "Energized Electrical Circuits"
3. If water reactive electrochemical battery energy storage system are present the signage shall include "APPLY NO WATER"
4. Current contact information, including phone number, for personnel authorized to service the equipment and fire mitigation personnel.

Section 1206.2.8.7 Outdoor installations is amended to read as follows:

1206.2.8.7 Outdoor installations. Stationary storage battery systems located outdoors shall comply with Sections 1206.2.8.7 through 1206.2.8.7.4, in addition to all applicable requirements of Section 1206.2. Installations in outdoor enclosures or

containers that can be occupied for servicing, testing, maintenance and other functions shall be treated as battery storage rooms.

Remote outdoor installations include stationary battery systems located more than 100 feet from buildings, property lines, public ways, stored combustible storage, hazardous materials, high piled stock and other exposure hazards.

Installations near exposures include all outdoor stationary battery systems that are not more than 100 feet from buildings, property lines, public ways, stored combustible storage, hazardous materials, high piled stock and other exposure hazards.

Exception: Stationary battery arrays in noncombustible containers shall not be required to be spaced 3 feet (914 mm) from the container walls.

Table 1206.2.8.7 OUTDOOR INSTALLATIONS

| <u>Compliance Required</u>                | <u>Remote Installations</u> | <u>Installations</u>  |
|---|-----------------------------|-----------------------|
|   |                             | <u>Near Exposures</u> |
| <u>General Installation Requirements</u>  | Yes                         | Yes                   |
| <u>Size and separation</u>                | No                          | Yes <sup>a</sup>      |
| <u>Smoke and automatic fire detection</u> | Yes                         | Yes                   |
| <u>Fire suppression systems</u>           | Yes <sup>b</sup>            | Yes                   |
| <u>Maximum enclosure size</u>             | Yes                         | Yes                   |
| <u>Vegetation control</u>                 | Yes                         | Yes                   |
| <u>Means of egress separation</u>         | Yes                         | Yes                   |
| <u>Clearance to exposures</u>             | Yes                         | Yes                   |

a. In outdoor walk-in units, spacing is not required between energy storage systems units and the walls of the enclosure.  
b. Where approved by the fire code official, fire suppression systems are permitted to be omitted.

Section1206.2.8.7.1 Separation is amended to read as follows:

1206.2.8.7.1 Separation. Stationary storage battery systems located outdoors shall be separated by a minimum 10 feet (3048 mm) from the following:

- 1. Lot lines.
- 2. Public ways.
- 3. Buildings.
- 4. Stored combustible materials.
- 5. Hazardous materials.
- 6. High-piled stock.
- 7. Other exposure hazards.

Exception: The fire code official is authorized to approve smaller separation distances if largescale fire and fault condition testing conducted or witnessed and

reported by an approved testing laboratory is provided showing that a fire involving the system will not adversely impact occupant egress from adjacent buildings, or adversely impact adjacent stored materials or structures.

Section 1206.2.10 Storage batteries and equipment is amended to read as follows:

1206.2.10 Storage batteries and equipment. The design and installation of storage batteries and related equipment shall comply with Sections 1206.2.10.1 through 1206.2.10.8.

Battery storage systems installations shall comply with the requirements of this Section in accordance with the applicable requirements of Table 1206.2.10

TABLE 1206.2.10 BATTERY TECHNOLOGY SPECIFIC

| <u>Compliance Required<sup>b</sup></u>  | <u>Battery Technology</u> |                           |                        |             | <u>Other Battery Storage Systems and Battery Technologies<sup>b</sup></u> |
|---|---------------------------|---------------------------|------------------------|-------------|---|
|   | <u>Lead acid</u>          | <u>Ni-Cad &amp; Ni-MH</u> | <u>Lithium-ion</u>     | <u>Flow</u> |   |
| <u>Exhaust ventilation</u>              | <u>Yes</u>                | <u>Yes</u>                | <u>Yes</u>             | <u>Yes</u>  | <u>Yes</u>  |
| <u>Spill control and neutralization</u> | <u>Yes<sup>c</sup></u>    | <u>Yes<sup>c</sup></u>    | <u>No</u>              | <u>Yes</u>  | <u>Yes</u>  |
| <u>Explosion control</u>                | <u>Yes<sup>a</sup></u>    | <u>Yes<sup>a</sup></u>    | <u>Yes</u>             | <u>Yes</u>  | <u>Yes</u>  |
| <u>Safety Caps</u>                      | <u>Yes</u>                | <u>Yes</u>                | <u>No</u>              | <u>Yes</u>  | <u>Yes</u>  |
| <u>Thermal runaway</u>                  | <u>Yes<sup>d</sup></u>    | <u>Yes</u>                | <u>Yes<sup>c</sup></u> | <u>Yes</u>  | <u>Yes<sup>c</sup></u>  |

- a. Not required for lead-acid and nickel cadmium batteries at facilities under the exclusive control of communications utilities that comply with NFPA 76 and operate at less than 50 VAC and 60 VDC.
- b. Protection shall be provided unless documentation acceptable to the fire code official is provided in accordance with 2021 International Fire Code Section 104.7.2 that provides justification why the protection is not necessary based on the technology used.
- c. Applicable to vented (i.e. flooded) type nickel cadmium and lead acid batteries.
- d. Not required for vented (i.e. flooded) type lead acid batteries.

The thermal runaway protection is permitted to be part of a battery management system that has been evaluated with the battery as part of the evaluation to UL 1973.

Section 1206.2.10.3. Energy management system is amended to add 1206.2.10.3.1 Annunciator panel:

1206.2.10.3.1 Annunciator panel. The approved annunciator panel shall visibly indicate any hazardous temperature or other conditions. The location of the annunciator panel shall be approved by the fire code official.

Section 1206.2.10.6 Safety caps is amended to read as follows:

1206.2.10.6 Safety caps. Where required by Table 1206.2.10, batteries shall be provided with flame- arresting safety caps.

Section 1206.2.11 Fire-extinguishing and detection systems is amended to read

as follows:

1206.2.11 Fire protection and life safety systems. Fire protection and life safety systems shall be provided in accordance with Sections 1206.2.11.1 through 1206.2.11.7. All alarm, and supervisory signals from the fire protection and life safety systems shall be transmitted to a central station, proprietary or remote station service in accordance with NFPA 72, and to an approved annunciator panel.

Section 1206.2.11.1 Fire-extinguishing systems is amended to read as follows:

1206.2.11.1 Fire-extinguishing systems. Rooms and areas within buildings and walk-in units containing electrochemical battery energy storage systems shall be equipped with an automatic sprinkler system installed in accordance with Section 903.3.1.1. Commodity classifications for specific technologies of storage batteries shall be in accordance with Chapter 5 of NFPA 13. If the storage battery types are not addressed in Chapter 5 of NFPA 13, the fire code official is authorized to approve the fire-extinguishing system based on full scale fire and fault condition testing conducted or witnessed and reported by an approved laboratory.

Section 1206.2.11.1.1 Alternative fire-extinguishing systems is amended and shall read as follows:

1206.2.11.1.1 Fire-extinguishing systems. Rooms and areas within buildings and walk-in units containing electrochemical battery energy storage systems shall be protected by an automatic fire suppression system designed and installed in accordance with the most stringent of the following:

1. An automatic sprinkler system designed and installed in accordance with Section 903.3.1.1 with a minimum density of 0.6 gpm/ft. based on the fire area or 2,500 ft.<sup>2</sup> (232 m<sup>2</sup>) design area, whichever is smaller.
2. Where approved, an automatic sprinkler system designed and installed in accordance with Section 903.3.1.1 with a sprinkler hazard classification based on large scale fire testing.
3. An alternate automatic fire extinguishing systems designed and installed in accordance with Section 904, provided the installation is approved by the fire code official based on large scale fire testing

Exception: Fire suppression systems for lead acid and nickel cadmium battery systems at facilities under the exclusive control of communications utilities that operate at less than 50 VAC and 60 VDC shall be provided where required by NFPA 76

Section 1206.2.11.1 Fire-extinguishing systems is amended to add subsections 1206.2.11.1.2 Fire department connections, 1206.2.11.1.3 Hydrants, and 1206.2.11.1.4 Alternative fire-extinguishing systems.

1206.2.11.1.2 Fire department connections. Fire Department connections shall be installed in an approved location.

1206.2.11.1.3 Hydrants. Fire hydrants shall be installed and maintained in accordance with Chapter 5 and Chapter 9.

1206.2.11.1.4 Alternative fire-extinguishing systems. Battery systems that utilize water-reactive materials shall be protected by an approved alternative automatic fire extinguishing system in accordance with Section 904. The system shall be listed for protecting the type, arrangement and quantities of storage batteries in the room. The fire code official shall be permitted to approve the alternative fire extinguishing system based on full-scale fire and fault condition testing conducted or witnessed and reported by an approved laboratory.

Section 1206.2.11.3 Ventilation is amended to read as follows:

1206.2.11.3 Exhaust ventilation. Where required by Table 1206.2.10, ventilation of rooms containing stationary storage battery systems shall be provided in accordance with the International Mechanical Code and one of the following:

1. The ventilation system shall be designed to limit the maximum concentration of flammable gas to 10 percent of the lower flammability limit, or for hydrogen, 1.0 percent of the total volume of the room.
2. Continuous ventilation shall be provided at a rate of not less than 1 cubic foot per minute (cfm) per square foot [0.00508 m<sup>3</sup>/(s • m<sup>2</sup>)] of floor area, but not less than 150 cfm (4 m<sup>3</sup>/min). The exhaust system shall be designed to provide air movement across all parts of the floor for gases having a vapor density greater than air and across all parts of the vault ceiling for gases having a vapor density less than air.

Section 1206.2.11.5 Spill control and neutralization is amended to read as follows:

1206.2.11.5 Spill control and neutralization. Where required by Table 1206.2.10, approved methods and materials shall be provided for the control and neutralization of spills of electrolyte or other hazardous materials in areas containing stationary storage batteries as follows:

1. For batteries with free-flowing electrolyte, the method and materials shall be capable of neutralizing a spill of the total capacity from the largest cell or block to a pH between 5.0 and 9.0.
2. For batteries with immobilized electrolyte, the method and material shall be capable of neutralizing a spill of 3.0 percent of the capacity of the largest cell or block in the room to a pH between 5.0 and 9.0.

Section 1206.2.11.5 Spill control and neutralization is amended to add subsection 1206.2.11.5.1 Spill control barrier and shall read as follows:

1206.2.11.5.1 Spill control barrier. Each rack of batteries, or group of racks shall be provided with a liquid-tight 4-inch (102 mm) spill control barrier which extends at least 1-inch (25 mm) beyond the battery rack in all directions.

Section 1206.2.11 Fire protection and life safety systems is amended to add subsection 1206.2.11.6 Explosion control and 1206.2.11.7 Emergency energy release and shall read as follows:

1206.2.11.6 Explosion Control. Where required by Table 1206.2.10, explosion control, complying with Section 911, NFPA 68 and NFPA 69, shall be provided for rooms, areas or walk-in units containing electrochemical battery energy storage system technologies.

Exceptions:

1. Where approved, explosion control is permitted to be waived by the fire code official based on large scale fire testing which demonstrates that flammable gases are not liberated from electrochemical battery energy storage system cells or modules.
2. Where approved, explosion control is permitted to be waived by the fire code official based on documentation provided in accordance with Section 104.7 that demonstrates that the electrochemical battery energy storage system technology to be used does not have the potential to release flammable gas concentrations in excess of 25 percent of the lower flammable limit (LFL) anywhere in the room, area, walk-in unit or structure under thermal runaway or other fault conditions.

1206.2.11.7 Emergency energy release. An approved means must be provided to safely release stored energy from the batteries in an emergency situation.

Section 1206.2.12 Specific battery-type requirements is amended to read as follows:

1206.2.12 Specific battery-type requirements. This section includes requirements applicable to specific types of storage batteries. Stationary storage battery systems with more than one type of storage battery shall comply with requirements applicable to each battery type.

Ventilation, spill control and neutralization, explosion control, safety caps and thermal runaway shall be required in accordance with Table 1206.2.10

Section 1206.2.12.2 Nickel-cadmium (Ni-Cd) storage batteries is amended to read as follows:

1206.2.12.2 Nickel-cadmium (Ni-Cd) storage batteries. Stationary storage battery systems utilizing nickel cadmium (Ni-Cd) storage batteries shall comply with the following:

1. The signage in Section 1206.2.8.6 shall indicate the room contains lead-acid batteries.

Section 1206.2 Stationary storage battery systems is amended to add subsections 1206.2.13 Special installations, 1206.2.13.1 Rooftop installations, 1206.2.13.2 Open parking garage installations, 1206.2.13.3 Clearance to exposures, 1206.2.13.4 Fire suppression systems, 1206.2.13.5 Rooftop installations, 1206.2.13.6 Open parking garages and Table 1206.2.13 Special installations.

1206.2.13 Special Installations. Rooftop and open parking garage battery energy storage system installations shall comply with Sections 1206.2.13 through 1206.2.13.6. Signage shall comply with section 1206.2.8.6.

1206.2.13.1 Rooftop installations. For the purpose of Table 1206.2.12.7.13, rooftop installations are those located on the roofs of buildings.

1206.2.13.2 Open parking garage installations. For the purpose of Table 1206.2.13, open parking garage installations are those located in a structure or portion of a structure that complies with Section 406.5 of the International Building Code.

| TABLE 1206.2.13 SPECIAL INSTALLATIONS |          |                      |
|---------------------------------------|----------|----------------------|
| Compliance Required                   | Rooftops | Open Parking Garages |
| General Installation Requirements     | Yes      | Yes                  |
| Size and separation                   | Yes      | Yes                  |
| Smoke and automatic fire detection    | Yes      | Yes                  |
| Maximum enclosure size                | Yes      | Yes                  |
| Means of egress separation            | Yes      | Yes                  |
| Clearance to exposures                | Yes      | Yes                  |
| Fire suppression systems              | Yes      | Yes                  |
| Technology specific protection        | Yes      | Yes                  |

1206.2.13.3 Clearance to exposures. Battery storage systems located on rooftops and in open parking garages shall be separated by a minimum 10 feet (3048 mm) from the following exposures:

1. Buildings, except the building on which rooftop battery energy storage system is mounted
2. Any portion of the building on which a rooftop system is mounted that is elevated above the rooftop on which the system is installed
3. Lot lines
4. Public ways
5. Stored combustible materials
6. Locations where motor vehicles can be parked
7. Hazardous materials



8. Other exposure hazards

Exceptions:

1. Clearances are permitted to be reduced to 3 feet (914 mm) where a 1-hour free standing fire barrier, suitable for exterior use, and extending 5 feet (1524 mm) above and extending 5 feet (1524 mm) beyond the physical boundary of the battery energy storage system installation is provided to protect the exposure.
2. Clearances are permitted to be reduced to 3 feet (914 mm) where a weatherproof enclosure of noncombustible materials is provided over the battery energy storage system and it has been demonstrated that a fire within the enclosure will not ignite combustible materials outside the enclosure based on large scale fire testing.

1206.2.13.4 Fire suppression systems. Battery storage systems located in walk-in units on rooftops or in walk-in units in open parking garages shall be provided with automatic fire suppression systems within the battery energy storage system enclosure in accordance with Section 1206.2.11.1. Areas containing battery energy storage system other than walk-in units in open parking structures on levels not open above to the sky shall be provided with an automatic fire suppression system complying with Section 1206.2.11.1.

1206.2.13.5 Rooftop installations. Battery storage systems and associated equipment that are located on rooftops and not enclosed by building construction shall comply with the following:

1. Stairway access to the roof for emergency response and fire department personnel shall be provided either through a bulkhead from the interior of the building or a stairway on the exterior of the building.
2. Service walkways at least 5 feet (1524 mm) in width shall be provided for service and emergency personnel from the point of access to the roof to the system.
3. Battery storage systems and associated equipment shall be located from the edge of the roof a distance equal to at least the height of the system, equipment, or component but not less than 5 feet (1524 mm).
4. The roofing materials under and within 5 feet (1524 mm) horizontally from a battery storage systems or associated equipment shall be noncombustible or shall have a Class A rating when tested in accordance with ASTM E108 or UL 790.
5. A Class I standpipe outlet shall be installed at an approved location on the roof level of the building or in the stairway bulkhead at the top level.
6. The battery storage systems shall be the minimum of 10 feet (3048 mm) from the fire service access point on the rooftop.

1206.2.13.6 Open parking garages. Battery storage systems and associated

equipment that are located in open parking garages shall comply with all of the following:

1. Battery storage systems shall not be located within 50 feet (15 240 mm) of air inlets for building HVAC systems.  
Exception: This distance shall be permitted to be reduced to 25 feet (7620 mm) if the automatic fire alarm system monitoring the radiant-energy sensing detectors de-energizes the ventilation system connected to the air intakes upon detection of fire.
2. Battery storage systems shall not be located within 25 feet (7620 mm) of exits leading from the attached building where located on a covered level of the parking structure not directly open to the sky above.
3. An approved fence with a locked gate or other approved barrier shall be provided to keep the general public at least 5 feet (1024 mm) from the outer enclosure of the battery energy storage system.

(ddd) Section 1206 is amended to add subsections 1206.4 Energy storage system in Group R-3 and R-4 occupancies, 1206.4.1 Equipment listings, 1206.4.2 Installation, 1206.4.2.1 Spacing, 1206.4.3 Location, 1206.4.3.1 Exterior wall and outdoor installations, 1206.4.4 Energy ratings, 1206.4.5 Electrical installation, 1206.4.6 Fire detection, 1206.4.7 Protection from impact, 1206.4.8 Ventilation, 1206.4.9 Toxic and highly toxic gas.

1206.4 Energy storage system in Group R-3 and R-4 occupancies. Energy storage systems in Group R-3 and R-4 occupancies shall be installed and maintained in accordance with this section. The temporary use of an owner or occupant's electric powered vehicle as an energy storage system shall be in accordance with Section 1206.4.

Exception: Energy storage systems in Group R-3 and R-4 occupancies with a capacity of 3 kWh or less.

1206.4.1 Equipment listings. Energy storage system shall be listed and labeled for residential use in accordance with UL 9540.

Exceptions:

1. Where approved, repurposed unlisted battery systems from electric vehicles may be installed outdoors or in detached dedicated cabinets located not less than 5 feet (1524 mm) from exterior walls, property lines and public ways.
2. Energy storage system less than 1 kWh.

1206.4.2 Installation. Energy storage system shall be installed in accordance with the manufacturer's instructions and their listing.

1206.4.2.1 Spacing. Individual units shall be separated from each other by at least 3 feet (914 mm) of spacing unless smaller separation distances are documented and approved by the fire code official to be adequate based on large scale fire testing.

1206.4.3 Location. Energy storage system shall only be installed in the following locations:

1. Detached garages and detached accessory structures.
2. Attached garages separated from the dwelling unit living space and sleeping units in accordance with Section 406.3.2 of the International Building Code.
3. Outdoors on exterior walls in accordance with 1206.4.3.1
4. Other locations with fire code official approval.

1206.4.3.1 Exterior wall and outdoor installations. Energy storage system shall be permitted to be installed outdoors on exterior walls of buildings or on the ground when all of the following conditions are met:

1. The maximum energy capacity of individual energy storage system units shall not exceed 20 kWh.
2. The installation is in accordance with Zoning setback requirements.
3. The energy storage system shall be installed in accordance with the manufacturer's instructions and their listing.
4. Individual energy storage system units shall be separated from each other by not less than 3 feet (914 mm).
5. The energy storage system shall be separated from doors, windows, operable openings into buildings, or HVAC inlets by at least 5 feet (1524 mm).

Exception: Where approved by the fire code official, smaller separation distances in items 4 and 5 may be permitted based on large scale fire testing.

1206.4.4 Energy ratings. Individual energy storage system units shall have a maximum rating of 20 kwh. The aggregate rating structure shall not exceed 80 kWh:

1206.4.5 Electrical installation. Energy storage system shall be installed in accordance with NFPA 70. Inverters shall be listed and labeled in accordance with UL 1741 or provided as part of the UL 9540 listing. Systems connected to the utility grid shall use inverters listed for utility interaction.

1206.4.6 Fire detection. Areas in which energy storage systems are installed shall be protected by smoke alarms in accordance with Section 907.2.10. A heat detector listed and interconnected to the smoke alarms shall be installed in locations where smoke alarms cannot be installed based on their listing.

1206.4.7 Protection from impact. Stationary storage battery systems installed in a location subject to vehicle damage shall be protected by approved barriers. Appliances

in garages shall also be installed in accordance with Section 304.3 of the International Mechanical Code.

1206.4.8 Ventilation. Indoor installations of energy storage system that include batteries that produce hydrogen or other flammable gases during charging shall be provided with ventilation in accordance with Section 1206.2.11.3.

1206.4.9 Toxic and highly toxic gas. Energy storage system that have the potential to release toxic or highly toxic gas during charging, discharging and normal use conditions shall not be installed within Group R-3 or R-4 occupancies.

(eee) Section 2308.3 Location of dispensing operations and equipment: is amended by adding the following subsection 2308.3.2 Vehicle impact protection.

2308.3.2 Vehicle impact protection. Vehicle impact protection for CNG gas storage containers, pumps and dispensers shall be provided in accordance with section 2306.4.

(ddd)(fff) Section 3312.1, ~~pertaining to titled~~ When Required, is amended and shall read as follows:

3312.1 When required. An approved water supply for fire protection, either temporary or permanent, shall be made available before combustible material arrives on the site. The minimum fire flow requirement when a contractor or developer brings combustible materials on site is 1,500 gpm at 20 psi. At least one fire hydrant shall be within 500 feet of any combustible materials and capable of delivering the minimum fire flow requirement. Any hydrant may be either temporary or permanent as the project schedule permits. In addition, there are times when hydrants and valves must be closed temporarily for repair work or construction of the water system. The developer/contractor is responsible for ensuring that the water supply is available at all times. When the work is complete, developer/contractor shall coordinate with the Utilities Department to make sure that the fire hydrants are active and the valves are open.

(eee)(ggg) Section 2308.3 is amended by adding the following subsection 2308.3.2 Vehicle impact protection.

Section 2308.3.2 Vehicle impact protection. Vehicle impact protection for CNG gas storage containers, pumps and dispensers shall be provided in accordance with section 2306.4.

(fff)(hhh) Section 3504.2.6 Fire extinguishers is amended to read as follows:

3504.2.6 Fire extinguisher. A minimum of one portable fire extinguisher complying with Section 906 and with a minimum 2-A:20-B:C rating shall be readily accessible within 30 feet (9144 mm) of the location where hot work is performed and shall be accessible without climbing stairs or ladders.

~~(ggg)(iii)~~ Section 5307 Compressed Gases Not Otherwise Regulated is amended to add subsections 5307.1.1 Operational Permit; subsection 5307.1.2 Construction Permit; and subsections 5307.3 through 5307.3.10.1 and shall read as follows ~~is hereby renumbered and amended with the following:~~

5307.31.1 Operational Permit. An Operational Permit is required to store, use or handle a previously approved insulated liquid carbon dioxide system that exceeds the amount indicated on Table 105.6.8.

5307.31.2 Construction Permit. A construction permit is required to install, repair damage to, abandon, remove, place temporarily out of service, close or substantially modify a compressed gas system in excess of the amounts listed in Table 105.6.8, whether new or existing.

5307.3 ~~Scope~~. Insulated liquid carbon dioxide systems used for beverage dispensing systems, whether stored as a liquid or gas, with more than 50 pounds or 500 cubic feet NTP shall be required to comply with this section for all new and existing systems installed.

5307.3.3 Insulated liquid carbon dioxide system used in beverage dispensing applications. The following requirements apply to all insulated liquid carbon dioxide systems that exceed the amount indicated on Table 105.6.8. These requirements are to be incorporated into the submittal process for the construction permits and are subject to inspection comments.

5307.3.3.1 Venting. All venting is to be piped to the outside atmosphere.

5307.3.3.2 Anchoring. When used, insulated liquid carbon dioxide containers are to be anchored to the slab.

5307.3.3.3 Movement. When used, high pressure compressed gas carbon dioxide cylinders are to be properly secured from movement.

5307.3.3.4 Hose and fittings. All hoses and fittings used on the system are to be manufacturer approved.

5307.3.3.5 Warning signs. Warning signs are to be provided.

5307.3.3.6 Slave cylinders. When using high pressure compressed gas cylinders, only one (1) cylinder can be connected into the beverage system at a time. A second cylinder can be connected as long as a three way transfer switch is used so that no more than one (1) cylinder can be used at a time. This option will not require a permit from the Fire Department.

5307.3.4 Design Requirements. Wherever carbon-dioxide is used in a compressed gas system, the following provisions are to be incorporated into the

system design. This will apply whether the carbon-dioxide for the system is stored as a gas or in a liquid form. The submittals are to address the following requirements and are to include a floor plan drawing showing the location of all major components along with providing data sheets for the equipment provided.

5307.3.5 Detection. A carbon dioxide gas detection system is to be provided. The detector is to be installed per the manufacturer's instructions. A minimum of one (1) detector is required to be placed by the cylinder or where the pressure regulators are located, if the cylinder is located outside. If the building has areas that are lower than the grade level, additional detection devices are to be provided.

5307.3.6 Local alarm. A local alarm and strobe are to be provided. The alarm device is to provide a minimum 75 dBA at 10 feet. The strobe is to provide a minimum 100 Cd. The devices are to be located in an area that will alert the occupants of the building.

5307.3.7 New buildings. For buildings that are constructed new, the building fire alarm system shall be designed to monitor two (2) points on the gas detection system. The building fire alarm system shall be capable of reporting specific signals to the Central Station for the following alarms. These signals are in addition to the other required signals to be sent to the Central Station.

5307.3.7.1 Supervisory signal. A supervisory signal is to be sent when the gas detector activates at 1.5%. This shall provide a supervisory signal at the fire alarm control panel and shall report a supervisory signal to the Central Station.

5307.3.7.2 Alarm signal. An alarm signal is to be sent when the gas detector activates at 3%. This shall provide an alarm signal at the fire alarm control panel, provide full building evacuation and shall report a "**CO-2 Alarm**" signal to the Central Station.

5307.3.8 Existing buildings with a capable fire alarm system. For buildings that are existing, the building fire alarm system is to be evaluated to determine the capability of monitoring the gas detection system. If capable, the building fire alarm system shall be designed to monitor two (2) points on the gas detection system. The building fire alarm system shall be capable of reporting specific signals to the Central Station for the following alarms. These signals are in addition to the other required signals to be sent to the Central Station.

5307.3.8.1 Supervisory signal. A supervisory signal is to be sent when the gas detector activates at 5000 ppm (9000mg/m<sup>3</sup>)~~1.5%~~. This shall provide a supervisory signal at the fire alarm control panel and shall report a supervisory signal to the Central Station.

5307.3.8.2 Alarm signal. An alarm signal is to be sent when the gas detector activates at 30,000 ppm (54000 mg/m<sup>3</sup>)~~3%~~. This shall provide an alarm signal at the fire alarm control panel, provide full building evacuation and shall report a "CO-2 Alarm" signal to the Central Station.

5307.3.9 Existing buildings without a capable fire alarm system. For buildings that are existing, the building fire alarm system is to be evaluated to determine the capability of monitoring the gas detection system. If the building fire alarm system is not capable of monitoring and transmitting a separate signal to the Central Station, the building fire alarm system shall report the following signals to the Central Station for the following alarms. These signals are in addition to the other required signals to be sent to the Central Station.

5307.3.9.1 Supervisory signal. A supervisory signal is to be sent when the gas detector activates at 1.5%. This shall provide a supervisory signal at the fire alarm control panel and shall report a supervisory signal to the Central Station.

5307.3.9.2 Alarm signal. An alarm signal is to be sent when the gas detector activates at 3%. This shall provide an alarm signal at the fire alarm control panel, provide full building evacuation and shall report an alarm signal to the Central Station.

5307.3.9.3 Exterior alarm device. An alarm device is to be installed outside the building at the Fire Department entrance to notify personnel of a CO-2 activation. This device shall be labeled as a CO-2 alarm and shall activate upon activation of the CO-2 sensor.

5307.3.10 Existing buildings without a fire alarm system. For buildings that do not have a building fire alarm system, the following is to be provided.

5307.3.10.1 Exterior alarm device. In addition to the CO-2 detection and alarms inside the building, an additional alarm device is to be located outside the building at the Fire Department entrance to notify personnel of a CO-2 activation. This device shall be labeled as a CO-2 alarm and shall activate upon activation of the CO-2 sensor.

~~(hhh)~~(jjj) Section 5607 Blasting is amended to add subsections 5607.16 Neighborhood notification; 5607.17 Pre-blast surveys; 5607.18 Monitoring; 5607.19 Blast log; 5607.20 Marked items; 5607.21 Traffic barricading; 5607.22 Signage; 5607.23 Post-blast surveys; 5607.24 Additional requirements; 5607.25 Standby personnel and equipment; and 5607.26 Hold harmless agreement and shall read as follows:

Section 5607.1 General. Is amended adding subsection 5607.1.1 and shall read as follows:

5607.1 General. Blasting operations shall be conducted only by approved, authorized operators familiar with the required safety precautions and the hazards involved and in accordance with the provisions of NFPA 495. Certificates and/or licenses (local, State or Federal) are to be provided when requested by the Fire Code Official.

5607.1.1 Attendance. The approved and authorized blaster shall be in attendance when the explosive materials arrive at the site and shall remain in attendance until the blasting operation is completed.

~~5607.2 Manufacturer's instructions. Blasting operations shall be performed in accordance with the instructions of the manufacturer of the explosive materials being used.~~

~~5607.3 Blasting in congested areas. When blasting is done in a congested area or in close proximity to a structure, railway or highway, or any other installation, precautions shall be taken to minimize earth vibrations and air blast effects. Blasting mats or other protective means shall be used to prevent fragments from being thrown.~~

Section 5607.4 Restricted hours. Is amended and shall read as follows:

5607.4 Restricted hours. Surface-blasting operations shall only be conducted Monday through Friday, 8:00 a.m. to 5:00 p.m. Blasting operations are not allowed on legal or city-observed holidays.

Exception: Unless otherwise approved by the Fire Code Official.

Section 5607.5 Utility notification. Is amended and shall read as follows:

5607.5 Utility notification. Whenever blasting is being conducted in the vicinity of utility lines or rights-of-way, the blaster shall notify the appropriate representatives of the utilities at least 24 hours in advance of blasting, specifying the location and intended time of such blasting. Verbal notices shall be confirmed with written notice. Confirmation of such contacts and approvals from the utilities or right-of-way governing authority is to be provided to the Fire Code Official when requested.

Exception: In an emergency situation, the time limit shall not apply when approved by the Fire Code Official.

Section 5607.9 Drill holes is amended to add subsection 5607.9.1 Loading of holes and shall read as follows:

5607.9.1 Loading of holes. Explosive materials shall not be loaded into the ground until a valid permit, issued by the Fire Code Official, is on-site. Explosive materials shall not be left in the ground overnight.

~~5606~~5607.16 Neighborhood notification. When required by the Fire Code Official, the blasting contractor shall provide written notification to the owner or occupant of each building or structure within a 500-foot (152 400 mm) radius of the use site or as recommended by the seismic study, whichever is greater. The notification shall be required at a time interval specified by the Fire Code Official but not less than 24 hours prior to the discharge of explosive materials. Neighborhood notification shall include the following information:

1. Dates and times of blasting.
2. Contact information for the blasting company.
3. Description of what to expect such as dust, vibration, noise, etc.



4. Traffic detours.
5. Websites for additional information or notices.

5607.17 Pre-blast surveys. Prior to the discharge of explosive materials, a pre-blast survey of all structures or buildings within a 500-foot (152 400 mm) radius of the blast site or as recommended by the seismic study, whichever is greater, shall be conducted, documenting existing structural damage.

The contractor shall make a minimum of four attempts to contact the owner or operator of a structure or building in the pre-blast survey area. At least two of the attempted contacts shall be made between 6:00 p.m. and 8:00 p.m. local time. If unsuccessful, a statement on contractor letterhead detailing the address, dates, times and the name of the person(s) attempted to be contacted shall be submitted to the Fire Code Official prior to blasting operations beginning.

When access to the property is denied, a statement on contractor letterhead detailing the name of the person denying access, the address, dates, times and the name of the person attempting to make the contacts shall be submitted to the Fire Code Official.

5607.18 Monitoring. Seismic (ground vibration) and air blast monitoring shall be conducted when buildings or structures are located within a 500-foot (152 400 mm) radius of the blast site or as recommended by the seismic study, whichever is greater. The monitoring shall be conducted at the closest building or structure. When seismic and air blast monitoring are required, the maximum allowable values shall be as follows:

Seismic: 1 inch per second (1.0) peak particle velocity. Air blast: 129 decibels.

~~5607.9 Electric detonator precautions. Precautions shall be taken to prevent accidental discharge of electric detonators from currents induced by radar and radio transmitters, lightning, adjacent power lines, dust and snow storms, or other sources of extraneous electricity.~~

~~5607.10 Nonelectric detonator precautions. Precautions shall be taken to prevent accidental initiation of nonelectric detonators from stray currents induced by lightning or static electricity.~~

~~5607.11 Blasting area security. During the time that holes are being loaded or are loaded with explosive materials, blasting agents or detonators, only authorized persons engaged in drilling and loading operations or otherwise authorized to enter the site shall be allowed at the blast site. The blast site shall be guarded or barricaded and posted. Blast site security shall be maintained until after the post-blast inspection has been completed.~~

~~5607.12 Drill holes. Holes drilled for the loading of explosive charges shall be made and loaded in accordance with NFPA 495.~~

~~5607.12.1 Loading of holes. Explosive materials shall not be loaded into the ground until a valid permit, issued by the Fire Code Official, is on-site. Explosive~~

~~materials shall not be left in the ground overnight.~~

~~5607.13 Removal of excess explosive materials. After loading for a blast is completed and before firing, excess explosive materials shall be removed from the area and returned to the proper storage facilities.~~

~~5607.14 Initiation means. The initiation of blasts shall be by means conforming to the provisions of NFPA 495.~~

~~5607.15 Connections. The blaster shall supervise the connecting of the blastholes and the connection of the loadline to the power source or initiation point. Connections shall be made progressively from the blasthole back to the initiation point.~~

~~Blasting lead lines shall remain shunted (shorted) and shall not be connected to the blasting machine or other source of current until the blast is to be fired.~~

~~5607.16 Firing control. No blast shall be fired until the blaster has made certain that all surplus explosive materials are in a safe place in accordance with Section 5607.13, all persons and equipment are at a safe distance or under sufficient cover and that an adequate warning signal has been given.~~

~~5607.17 Post blast procedures. After the blast, the following procedures shall be observed.~~

~~1. No person shall return to the blast area until allowed to do so by the blaster in charge.~~

~~2. The blaster shall allow sufficient time for smoke and fumes to dissipate and for dust to settle before returning to or approaching the blast area.~~

~~3. The blaster shall inspect the entire blast site for misfires before allowing other personnel to return to the blast area.~~

~~5607.18 Misfires. Where a misfire is suspected, all initiating circuits shall be traced and a search made for unexploded charges. Where a misfire is found, the blaster shall provide proper safeguards for excluding all personnel from the blast area. Misfires shall be reported to the blasting supervisor immediately. Misfires shall be handled under the direction of the person in charge of the blasting operation in accordance with NFPA 495.~~

5607.19 Blast log. A blast log shall be maintained by the approved and authorized blaster. The log shall document the fire department permit number, blaster's name and any license number, location of where the explosive materials were used, the date and time of each use, the seismic and air blast monitoring readings and the name of the individual or firm who conducted the monitoring. A copy of the blast log shall be submitted to the Fire Code Official. Failure to submit the log may cause the Fire Code Official to discontinue permit issuance until Code compliance.

5607.20 Marked items. Blasting cap wires and any items or devices marked "EXPLOSIVE" or "BLASTING CAP" shall be removed from the blast site at the end of each work day and properly disposed of.

5607.21 Traffic barricading. Traffic barricading shall be provided within 1,000 feet (304 800 mm) of public rights-of-way or as required by the City of Peoria Traffic Engineering Department. The blaster shall submit for and obtain a permit for a traffic control plan with the City of Peoria Traffic Engineering Department prior to explosive materials being brought on site.

5607.22 Signage. Signs reading "BLASTING ZONE AHEAD" and "TURN OFF TWO- WAY RADIOS" shall be provided when explosive material use is proposed within 1,000 feet (304 800 mm) of public rights-of-way.

5607.23 Post-blast surveys. When required by the Fire Code Official, after discharge of explosive materials a post-blast survey of all structures or buildings identified in the pre-blast survey shall be conducted documenting structural damage.

The contractor shall make a minimum of four attempts to contact the owner or operator of a structure or building in the post-blast survey area. At least two of the attempted contacts shall be made between 6:00 p.m. and 8:00 p.m. local time. If unsuccessful, a statement on contractor letterhead detailing the address, dates, times and the name of the person(s) attempted to be contacted shall be submitted to the Fire Code Official.

When access to the property is denied, a statement on contractor letterhead detailing the name of the person denying access, the address, dates, times and the name of the person attempting to make contacts shall be submitted to the Fire Code Official.

5607.24 Additional requirements. When deemed necessary, the Fire Code Official is authorized to make additional requirements.

5607.25 Standby personnel and equipment. When necessary for the preservation of life or property, the Fire Code Official is authorized to require the attendance of standby personnel and fire equipment.

5607.26 Hold harmless agreement. In addition to the financial responsibility required in 5601.2.4, the applicant shall execute a Hold Harmless Agreement in favor of the City of Peoria.

~~(iii)~~(kkk) Chapter 80 is amended to include the following reference standards:

NFPA 37 – 2010 Stationary Combustion Engines and Gas Turbines  
~~NFPA 45 – 2011 Fire Protection for Laboratories Using Chemicals~~  
NFPA 75 – 2013 Protection of Information Technology Equipment  
NFPA 76 – 2012 Telecommunication Facilities  
NFPA 82 – 2009 Incinerators, Waste and Linen Handling Systems and Equipment  
NFPA 88A – 2011 Parking Structures

NFPA 91 – 2010 Exhaust Systems for Air Conveying of Gases, etc.  
NFPA 92A – 2012 Smoke Control Systems  
~~NFPA 96 – 2011 Ventilation Control and Fire Protection of Commercial Cooking Operations~~  
NFPA 291 – 2013 Fire Flow Testing and Marking of Hydrants  
NFPA 418 – 2011 Heliports  
NFPA 610 – 2014 Motorsports Venues  
NFPA 820 – 2012 Fire Protection in Wastewater Treatment and Collection Facilities  
NFPA 855 – 2020 Standard for the Installation of Stationary Energy Storage Systems  
NFPA 1141 – 2012 Infrastructure for Land Development in Suburban and Rural Areas  
NFPA 2010 – 2010 Fixed Aerosol Fire Extinguishing Systems

~~(jjj) — Section D103.4 is amended to read as follows:~~

~~Section D103.4 Dead ends. Dead end fire apparatus access roads in excess of 150 feet shall be provided with width and turnaround provisions in accordance with Table D103.4 and Chapter 5 of NFPA 1141 – 2012.~~

~~(kkk) — Section D105 is amended by adding the following subsection D105.4 which shall read as follows:~~

~~Section D105.4 Buildings exceeding 30 feet (9144 mm) in height above the lowest level of Fire Department access shall meet the requirements listed in Section D104.1.~~

~~Exception: Apartment buildings equipped with an NFPA 13R sprinkler system. (lll) — Section D107.1 is amended to read as follows:~~

~~Section D107.1 One or two family dwelling residential developments. Developments of one or two family dwellings where the number of dwelling units exceeds 30 shall be provided with two separate and approved fire apparatus access roads, and shall meet the requirements of Section D104.3 and Chapter 5 of NFPA 1141 – 2012.~~

~~Exceptions:~~

~~1. — Where there are more than 30 dwelling units on a single public or private fire apparatus access road and all dwelling units are equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3 of the International Fire Code, access from two directions shall not be required.~~

~~2. — The number of dwelling units on a single fire apparatus access road shall~~

~~not be increased unless fire apparatus access roads will connect with future development, as determined by the Fire Code Official.~~

SECTION 3. If any section, subsection, sentence, clause, phrase or portion of this Ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision; and such shall not affect the validity of the remaining portions hereof.

SECTION 4. This ordinance shall become effective in the manner provided by law.

PASSED AND ADOPTED by the Mayor and Council of the City of Peoria, Arizona this 1st day of June, 2021.

\_\_\_\_\_  
Cathy Carlat, Mayor

\_\_\_\_\_  
Date Signed

ATTEST:

\_\_\_\_\_  
Rhonda Geriminsky, City Clerk

APPROVED AS TO FORM:

\_\_\_\_\_  
Vanessa P. Hickman, City Attorney

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