

ORDINANCE 8366

AN ORDINANCE AMENDING TITLE 10, "STRUCTURES," B.R.C. 1981 BY ADOPTING AND MODIFYING INTERNATIONAL CODES REGARDING PROPERTY MAINTENANCE, RENTAL LICENSES, BUILDING, ELECTRICAL, ENERGY CONSERVATION, COMMERCIAL AND INDUSTRIAL ENERGY EFFICIENCY, FIRE, WILDLAND, MECHANICAL, FUEL GAS, AND PLUMBING; ADOPTING THE 2020 CITY OF BOULDER ENERGY CONSERVATION CODE; AND SETTING FORTH RELATED DETAILS.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BOULDER, COLORADO:

Section 1. Chapter 10-1, "Definitions," B.R.C. 1981, is amended as follows:

10-1-1. - Definitions.

(a) The following terms used in this title have the following meanings unless the context clearly indicates otherwise:

....

Approved semi-rigid tubing connector means a flexible metal pipe connecting a gas residential dryer or range, if it meets the requirements of and is installed in accordance with the city ~~fuel~~mechanical gas code, or, if it is a commercial gas dryer or range, it is a connector supplied with the appliance from the manufacturer, or is an equivalent commercial grade flex connector, and is installed in accordance with the manufacturer's instructions.

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Section 2. Chapter 10-2, "Property Maintenance Code," B.R.C. 1981, is amended as follows:

10-2-1. - Legislative Intent.

....

(d) The city council hereby adopts the ~~2018~~2012 edition of the *International Property Maintenance Code* as the Property Maintenance Code of the City of Boulder. This chapter establishes minimum code standards related to: administration; definitions; general requirements; light, ventilation and occupancy limitations; plumbing facilities and fixture requirements; mechanical and electrical systems; fire safety requirements; and rental licensing; and existing residential rental structure energy conservation.

1 **10-2-2. - Adoption of International Property Maintenance Code With Modifications.**

- 2 (a) The ~~2012~~2012 edition of the *International Property Maintenance Code* (IPMC) of the
3 International Code Council is hereby adopted by reference as the City of Boulder
4 Property Maintenance Code and has the same force and effect as though fully set forth in
5 this chapter, except as specifically amended for local application by this chapter.
- 6 (b) IPMC Appendix chapters A, "Boarding Standard," B, "Rental Housing Inspections," and
7 C, "Energy Efficiency Requirement - Existing Residential Rental Structures Energy
8 Conservation," are adopted.
- 9 (c) For ease of reference, the following identifies all chapters, sections and appendices of the
published and adopted IPMC and includes specific amendments for local application.
Chapter, Section, Subsection, or Appendix numbers of provisions not amended appear,
followed by the words, "No changes." The amended text of specifically amended
provisions appears below. Chapter, Section, Subsection, or Appendix numbers of any
provisions not adopted appear, followed by the word, "Deleted."

10 **CHAPTER 1**

11 **SCOPE AND ADMINISTRATION**

12 **PART 1 - SCOPE AND ADMINISTRATION**

13

14 **SECTION 102**
15 **APPLICABILITY**

16 **102.1 General.** No changes.

17 **102.2 Maintenance.** Equipment, systems, devices, and safeguards required by this code
18 shall be maintained in accordance with the code in effect when the structure or premises
19 were legally constructed, altered, or repaired and shall be maintained in good working
20 order.

21 **102.3 Application of Other Codes.** Repairs, additions, or alterations to a structure,
22 inspections, or changes of occupancy shall be done in accordance with the procedures
23 and provisions of the City of Boulder Building Code, City of Boulder Residential Code,
24 City of Boulder Existing Building Code, City of Boulder Fuel Gas Code, City of Boulder
25 Mechanical Code, City of Boulder Plumbing Code, City of Boulder Fire Code, City of
Boulder Energy Conservation Code, and City of Boulder Electrical Code.

102.4—102.10 No changes.

26 **PART 2 - ADMINISTRATION AND ENFORCEMENT**

27 **SECTION 103**
28 **DIVISION OF BUILDING SAFETY**

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30 **103.2 Appointment.** Deleted.

31 **103.2 Deputies.** Deleted.

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103.5 Fees. The fees and costs for activities and services performed by the department in carrying out its responsibilities under this code shall be as detailed in ~~Section 111.9 of this code and~~ Section 4-20-47, "Zoning Adjustment and Building Appeals Filing Fees," B.R.C. 1981.

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SECTION 107 \ NOTICES AND ORDERS

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107.4 Unauthorized Tampering. No changes.

107.5 Penalties. Penalties for noncompliance with orders and notices shall be as set forth in Section 106.1.

107.6 Transfer of Ownership. Deleted.

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SECTION 109 EMERGENCY MEASURES

109.1 Imminent danger. When in the opinion of the code official, there is imminent danger of failure or collapse of a building or structure that endangers life, or when any structure or part of a structure has fallen and life is endangered by the occupation of the structure, or when there is actual or potential danger to the building occupants or those in the proximity of any structure because of explosives, explosive fumes or vapors or the presence of toxic fumes, gases or materials, or operation of defective or dangerous equipment, the code official is hereby authorized and empowered to order and require the occupants to vacate the premises forthwith. The code official shall cause to be posted at each entrance to such structure a notice bearing the words "Unsafe, Do Not Enter". It shall be unlawful for any person to enter such structure, except with the prior approval of the building official, for the purpose of securing the structure, making the required repairs, removing the hazardous condition or of demolishing the same.

~~109.2~~**109.1—109.6** No changes.

SECTION 110 DEMOLITION

110.1—110.4 No changes.

SECTION 111 MEANS OF APPEAL

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~~111.9 Fees.~~ Deleted.

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CHAPTER 3
GENERAL REQUIREMENTS

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SECTION 304
EXTERIOR STRUCTURE

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304.7 Roofs and Drainage. The roof and flashing shall be sound, tight and not have defects that admit water/rain. Roof drainage shall be adequate to prevent dampness or deterioration in the walls or interior portion of the structure. Roof drains, gutters and downspouts shall be maintained in good repair and free from obstructions. Roof water shall not be discharged in a manner that creates a public nuisance.

....

304.19 Gates. No changes.

SECTION 305
INTERIOR STRUCTURE

305.1 General. No changes.

305.1.1 Unsafe Conditions. The following conditions shall be determined as unsafe and shall be repaired or replaced to comply with the City of Boulder Residential Building Code or the City of Boulder Existing International Building Code as required for existing buildings:

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SECTION 306
COMPONENT SERVICEABILITY

~~306.1 & 306.1.1~~ No changes.

306.1.1 Unsafe Conditions. Where any of the following conditions cause the component or system to be beyond its limit state, the component or system shall be determined as unsafe and shall be repaired or replaced to comply with the City of Boulder Residential Code or the City of Boulder Existing Building Code as required for existing buildings:

1. Soils that have been subjected to any of the following conditions:

1.1. Collapse of footing or foundation system.

1.2. Damage to footing, foundation, concrete or other structural element due to soil expansion.

1.3. Adverse effects to the design strength of footing, foundation, concrete or other structural element due to a chemical reaction from the soil.

1.4. Inadequate soil as determined by a geotechnical investigation.

1.5. Where the allowable bearing capacity of the soil is in doubt.

- 1.6. Adverse effects to the footing, foundation, concrete or other structural element due to the ground water table.
2. Concrete that has been subjected to any of the following conditions:
- 2.1. Deterioration.
 - 2.2. Ultimate deformation.
 - 2.3. Fractures.
 - 2.4. Fissures.
 - 2.5. Spalling.
 - 2.6. Exposed reinforcement.
 - 2.7. Detached, dislodged or failing connections.
3. Aluminum that has been subjected to any of the following conditions:
- 3.1. Deterioration.
 - 3.2. Corrosion.
 - 3.3. Elastic deformation.
 - 3.4. Ultimate deformation.
 - 3.5. Stress or strain cracks.
 - 3.6. Joint fatigue.
 - 3.7. Detached, dislodged or failing connections.
4. Masonry that has been subjected to any of the following conditions:
- 4.1. Deterioration.
 - 4.2. Ultimate deformation.
 - 4.3. Fractures in masonry or mortar joints.
 - 4.4. Fissures in masonry or mortar joints.
 - 4.5. Spalling.
 - 4.6. Exposed reinforcement.
 - 4.7. Detached, dislodged or failing connections.
5. Steel that has been subjected to any of the following conditions:
- 5.1. Deterioration.
 - 5.2. Elastic deformation.
 - 5.3. Ultimate deformation.
 - 5.4. Metal fatigue.
 - 5.5. Detached, dislodged or failing connections.
6. Wood that has been subjected to any of the following conditions:
- 6.1. Ultimate deformation.
 - 6.2. Deterioration.
 - 6.3. Damage from insects, rodents and other vermin.
 - 6.4. Fire damage beyond charring.
 - 6.5. Significant splits and checks.
 - 6.6. Horizontal shear cracks.
 - 6.7. Vertical shear cracks.
 - 6.8. Inadequate support.
 - 6.9. Detached, dislodged or failing connections.
 - 6.10. Excessive cutting and notching.

Exceptions:

- 1. Where substantiated otherwise by an *approved* method.

2. Demolition of unsafe conditions shall be permitted where approved by the code official

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CHAPTER 6 MECHANICAL AND ELECTRICAL REQUIREMENTS

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SECTION 605 ELECTRICAL EQUIPMENT

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605.3 Luminaires. No changes~~Deleted.~~

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SECTION 607 DUCT SYSTEMS

607.1 General. No changes.

SECTION 608 CARBON MONOXIDE ALARMS

608.1 General. Carbon monoxide alarms shall be installed in existing residential structures in accordance with Colorado state law, including Title 38, Article 45, Carbon Monoxide Alarms, C.R.S.

608.2 Carbon Monoxide Alarms. Carbon monoxide alarms shall be installed in existing dwellings and rented single and multi-family dwellings that have fuel fired heaters, appliances, or fireplaces, or attached garages based on the following:

1. Alarms must be installed within 15' of the entrance to each sleeping area and must be wired to AC power, connected to an electrical panel, plugged into an electrical outlet without a switch or, if battery operated, attached to the wall or ceiling per the manufacturer's installation instructions and in accordance with National Fire Protection Association 70.
2. Alarms must be installed in existing rental dwellings upon change of tenant occupancy after July 1, 2009.
3. Alarms must be installed in all newly constructed or renovated single-family and multi-family rental units.
4. Alarms may be installed within 25' of any fuel fired heater or appliance, fireplace, or garage entrance in a multi-family dwelling used for rental purposes ONLY if the multi-family dwelling is equipped with a centralized alarm system or other mechanism that allows a responsible person to hear the alarm at all times (commercially monitored system).
5. Rental owners are responsible for replacing nonfunctioning carbon monoxide alarms upon written request of the tenant or when the unit is being vacated and rerented.
6. Carbon monoxide detectors shall not be disarmed, removed or have the batteries removed to make them inoperable.

1 **608.3 Carbon Monoxide Alarm Inspections.** Carbon monoxide alarm inspections shall be
conducted by the property owner or agent as detailed below.

- 2 1. Carbon monoxide alarms that receive their primary power from the building wiring
shall be checked for good operating condition once each year and supplied with battery
3 backup. The battery shall be replaced as necessary for proper function of the carbon
monoxide alarm.
4 2. Battery powered carbon monoxide alarms shall be tested for proper function on an
annual basis. Batteries shall be replaced as necessary for proper function of the carbon
5 monoxide alarm.

6 **CHAPTER 7**
FIRE SAFETY REQUIREMENTS
7 **SECTIONS 701—703**

8 No changes.

9 **SECTION 704**
FIRE PROTECTION SYSTEMS

10 704.1-704.7 No Changes.

11 704.8 Smoke Alarm Inspections. Smoke alarm inspections shall be conducted by the
property owner or agent as detailed below.

12 1. Smoke alarms that receive their primary power from the building wiring shall
13 be checked for good operating condition once each year and if supplied with
14 battery backup, the battery shall be replaced as necessary for proper function of
the smoke alarm.

15 2. Battery-powered smoke alarms shall be tested for proper function on an annual
16 basis. Batteries shall be replaced as necessary for proper function of the smoke
alarm.

17 704.9 Residential Rental Smoke Alarms. In R-occupancies governed by Chapter 10-3,
18 "Rental Licenses," B.R.C. 1981, smoke alarms shall be installed and inspected as
required in this section.

19 704.10 Fire Alarms. Fire alarms in existing residential structures shall be installed in
20 accordance with Chapter 10-8, Section 907.3, "Fire Code," B.R.C. 1981.

21 704.1—704.4 No changes.

22 704.5 Residential Rental Smoke Alarms. In R-occupancies governed by Chapter 10-3,
"Rental Licenses," B.R.C. 1981, smoke alarms shall be installed and inspected as
required in this section.

23 704.6 Smoke Alarm Inspections. Smoke alarm inspections shall be conducted by the
property owner or agent as detailed below.

- 24 1. Smoke alarms that receive their primary power from the building wiring shall
be checked for good operating condition once each year and if supplied with
25 battery backup, the battery shall be replaced as necessary for proper function of

the smoke alarm.

2. ~~Battery powered smoke alarms shall be tested for proper function on an annual basis. Batteries shall be replaced as necessary for proper function of the smoke alarm.~~

704.7 Fire Alarms. ~~Fire alarms in existing residential structures shall be installed in accordance with Chapter 10-8, Section 907.3, "Fire Code," B.R.C. 1981.~~

SECTION 705

CARBON MONOXIDE ALARMS

705.1 – 705.2 No changes.

705.3 General. Carbon monoxide alarms shall be installed in existing residential structures in accordance with Colorado state law, including Title 38, Article 45, Carbon Monoxide Alarms, C.R.S.

705.4 Carbon Monoxide Alarms. Carbon monoxide alarms shall be installed in existing dwellings and rented single and multi-family dwellings that have fuel fired heaters, appliances, or fireplaces, or attached garages based on the following:

1. Alarms must be installed within 15' of the entrance to each sleeping area and must be wired to AC power, connected to an electrical panel, plugged into an electrical outlet without a switch or, if battery operated, attached to the wall or ceiling per the manufacturer's installation instructions and in accordance with National Fire Protection Association 70.
2. Alarms must be installed in existing rental dwellings upon change of tenant occupancy after July 1, 2009.
3. Alarms must be installed in all newly constructed or renovated single-family and multi-family rental units.
4. Alarms may be installed within 25' of any fuel-fired heater or appliance, fireplace, or garage entrance in a multi-family dwelling used for rental purposes ONLY if the multi-family dwelling is equipped with a centralized alarm system or other mechanism that allows a responsible person to hear the alarm at all times (commercially monitored system).
5. Rental owners are responsible for replacing nonfunctioning carbon monoxide alarms upon written request of the tenant or when the unit is being vacated and rerented.
6. Carbon monoxide detectors shall not be disarmed, removed or have the batteries removed to make them inoperable.

705.5 Carbon Monoxide Alarm Inspections. Carbon monoxide alarm inspections shall be conducted by the property owner or agent as detailed below.

1. Carbon monoxide alarms that receive their primary power from the building wiring shall be checked for good operating condition once each year and supplied with battery backup. The battery shall be replaced as necessary for proper function of the carbon monoxide alarm.

2. Battery-powered carbon monoxide alarms shall be tested for proper function on an annual basis. Batteries shall be replaced as necessary for proper function of the carbon monoxide alarm.

SECTION ~~706~~705 PORTABLE FIRE EXTINGUISHERS

~~706.1~~705.1 **Where Required.** Portable fire extinguishers shall be installed as required by the City of Boulder Fire Code Section 906.

~~706.1.1~~705.1.1 In new and existing R-1, R-2 and R-4 occupancies, portable fire extinguishers need only be installed when interior corridors and common areas exist in accordance with Section 906.1 and table 906.3(2) for light (low) hazard occupancies and sections 906.3 through 906.9.

APPENDIX A BOARDING STANDARD

A101—~~A104~~A103 No changes.

APPENDIX B RENTAL HOUSING INSPECTION AND LICENSING

B101 Scope. Appendix B sets standards for administering the rental housing maintenance, inspection and licensing process.

B102 Rental Licenses. Residential rental licenses are applied for and renewed in accordance with Chapter 10-3, "Rental Licenses," B.R.C. 1981.

B103 Inspections. Rental inspections"Baseline" and "Renewal inspections" shall be performed and certified by licensed contractors as detailed in Chapter 4-4, "Building Contractor License," B.R.C. 1981.

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Section 3. Chapter 10-3, "Rental Licenses," B.R.C. 1981, is amended as follows:

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10-3-3. - Terms of Licenses.

....

- (b) In addition to any other applicable requirements, new licenses and renewals shall require that the licensee submit to the city manager a complete application packet for the license, on forms provided by the manager. The application shall satisfy the following requirements:

- (1) A current ~~rental~~baseline inspection report (for a new license except as set forth in Section 10-3-5, "License Procedure for Newly Constructed Rental Property," B.R.C.

1 1981,) or a current renewal inspection report executed by a rental housing inspector
2 certifying compliance with those portions of Chapter 10-2, "Property Maintenance
3 Code," and Section 9-9-16, "Lighting, Outdoor," B.R.C. 1981, for which the report form
4 requires inspection and certification.

5 (2) The operator shall certify on the application forms provided by the manager that
6 the operator has a current valid contract with a commercial trash hauler for removal of
7 accumulated trash from the licensed property in accordance with Subsection 6-3-3(b),
8 B.R.C. 1981.

9 (c) The city manager shall issue separate licenses for individual buildings. Such licenses
10 shall cover all dwelling units and rooming units within such buildings. In a building
11 containing attached but individually owned dwelling units, or any other dwelling units
12 which may be separately conveyed, the city manager shall issue separate licenses for each
13 dwelling unit. A structure, or group of structures, shall be considered to be a single
14 building if it has been assigned a single street address by the City. If a complex of
15 buildings on one property is under common ownership, and this owner is willing to have
16 a common expiration date for the licenses for all dwelling and rooming units, the city
17 manager may consider the whole complex to be the equivalent of a single building for the
18 purposes of licensing and the fee schedule in Section 4-20-18, "Rental License Fee,"
19 B.R.C. 1981.

20 (d) Whenever an existing license is renewed, the renewal license shall be effective from the
21 date of expiration of the last license if the applicant submits a complete renewal
22 application by or within ninety days from the expiration date. ~~Licenses not renewed~~
23 ~~within ninety days will be considered expired, requiring a new baseline inspection report.~~

24 (e) Issuance of any license (new or renewed) extending beyond December 31, 2018 requires
25 meeting the energy efficiency requirements of Chapter 10-2, "Property Maintenance
Code, Appendix C - Energy Efficiency Requirements," B.R.C. 1981.

....

17 **10-3-6. - License Application Procedure for Buildings Converted to Rental Property.**

18 Every operator converting a property to rental property shall follow the procedures in this
19 section for procuring a rental license:

20 (a) Submit to the city manager a complete application packet, on forms provided by the
21 manager, at least thirty days before rental of the property including:

22 (1) A rental housing inspector's certification of rentalbaseline inspection dated within
23 twelve months before the application. The operator shall make a copy of the inspection
24 form available to city staff and tenants of inspected units within fourteen days of a
25 request;

(2) The rental housing inspector shall certify in the rentalbaseline inspection report
the condition and location of all smoke and carbon monoxide alarms required by Chapter
10-2, "Property Maintenance Code," B.R.C. 1981;

(3) A trash removal plan meeting the requirements of Subsection 6-3-3(b), B.R.C.
1981, made and verified by the operator; and

(4) If the unit is an affordable accessory unit as defined in Section 9-16-1, "Definitions," B.R.C. 1981, a sworn certification that the unit will meet the rental affordability standard as defined in Section 9-16-1, "Definitions," B.R.C. 1981.

(b) Pay all license fees prescribed by Section 4-20-18, "Rental License Fee," B.R.C. 1981, ~~at the time of submitting the license application~~. The city manager shall not issue any rental license if the operator owes any fees or penalties, unless the penalties are subject to a pending appeal.

(c) Take all reasonable steps to notify any occupants of the property in advance of the date and time of the inspection. The operator shall be present and accompany the inspector throughout the inspection, unlocking and opening doors as required.

10-3-7. - License Renewal Procedure for Buildings Occupied as Rental Property.

Every operator of a rental property shall follow the procedures in this section when renewing an unexpired license:

(a) Submit to the city manager a complete application packet, on forms provided by the manager including:

(1) A rental housing inspector's certification of rental renewal inspection dated within twelve months before the application. The operator shall make a copy of the inspection form available to city staff and tenants of inspected units within fourteen days of a request;

(2) The rental housing inspector shall certify in the rental baseline inspection report the condition and location of all smoke and carbon monoxide alarms required by Chapter 10-2, "Property Maintenance Code," B.R.C. 1981;

....

10-3-12. - License Fees.

(a) Applicants for any rental housing license, and operators renewing an existing rental housing license, shall pay the license fees prescribed by Section 4-20-18, "Rental License Fee," B.R.C. 1981, prior to issuance~~upon submission~~ of any license application.

....

10-3-14. - Local Agent Required.

Whenever any rental property is required to be licensed under this chapter, and neither the owner nor the operator is a natural person domiciled within Boulder County, Colorado, the owner shall appoint a natural person who is capable of responding to the property within sixty minutes~~domiciled within Boulder County, Colorado~~, to serve as the local agent of the owner and the operator for service of such notices as are specified in Section 10-2-2, "Property Maintenance Code," Section 108, "Unsafe Structures and Equipment," and Section 109, "Emergency Measures," B.R.C 1981, and notices given to the local agent shall be sufficient to satisfy any requirement of notice to the owner or the operator. The owner shall notify the city manager in writing of the appointment within five days of being required to make such an appointment, and shall thereafter notify the city manager of any change of local agent within fifteen days of such change.

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Section 4. Chapter 10-5, "Building Code," B.R.C. 1981, is amended as follows:

10-5-1. - Legislative Intent.

The purpose of this chapter is to protect the public health and safety by regulating the construction, alteration, repair, wrecking, and moving of structures in the city. The city council hereby adopts the 20182012 edition of the *International Building Code* with certain amendments and deletions thereto found to be in the best interests of the residents of the city.

10-5-2. - Adoption of International Building Code With Modifications.

- (a) The 20182012 edition of the *International Building Code* of the International Code Council is hereby adopted by reference as the City of Boulder Building Code and has the same force and effect as though fully set forth in this chapter, except as specifically amended by the provisions of this chapter.
- (b) The appendix chapters I, "PATIO COVERS," J, "GRADING," and K, "ADMINISTRATIVE PROVISIONS," and sections contained therein are adopted.
- (c) Section 101.1, "Title," is repealed and reenacted to read:

101.1 Title. These regulations shall be known as the Building Code of the City of Boulder or building code, hereinafter referred to as "this code." Where other codes are referenced in this code, those code provisions shall not apply unless otherwise adopted by the City of Boulder. Where reference is made anywhere in this code to the "Department" or "Department of Building Safety," it shall have the same meaning as the "Division of Building Safety." Where reference is made anywhere in this code to the "International Energy Conservation Code," it shall have the same meaning as the "City of Boulder Energy Conservation Code."

- (d) Section 101.4, "Referenced codes," is repealed and reenacted to read:

Chapter 1, "Administration," in this code shall also apply and serve as Chapter 1, "Administration," in the following codes ~~adopted by reference in this title:~~ Chapter 10-2, "International Property Maintenance Code"; Chapter 10-5.5, "International Residential Code"; Chapter 10-5.6, "International Existing Building Code"; Chapter 10-7, "City of Boulder Energy Conservation Code"; Chapter 10-8.5, "International Wildland-Urban Interface Code"; Chapter 10-9, "International Mechanical Code"; Chapter 10-9.5, "International Fuel Gas Code"; and Chapter 10-10, "International Plumbing Code," B.R.C. 1981. Where administrative provisions are expressly adopted, or adopted in an altered form, for use in those chapters, they shall supersede any conflicting provisions of the administrative provisions of this chapter.

The other codes listed in Sections 101.4.1 through 101.4.7~~101.4.6~~ and referenced elsewhere in this code shall be considered as part of the requirements of this code as applicable.

....

- (j) Section 105.2, "Work exempt from permit," is repealed and reenacted to read:

1 **105.2 Work exempt from permit.** Exemptions from the building permit requirements of
2 this code do not grant authorization for any work to be done in violation of the requirements
3 of this code or any other laws or ordinances of the City. Building permits shall not be
4 required for the following:

5 General:

- 6 1. One-story detached nonconditioned buildings accessory to a residential structure and not
7 more than 80 square feet in area or ten feet in height and not being served by any
8 electrical, mechanical, or plumbing fixtures or systems.
- 9 2. Fences not over 7~~six~~ feet (2,134 mm) high.

10

11 (n) Section 107.1, "General," is repealed and reenacted to read:

12 **107.1 General.** An applicant for a building permit shall submit a minimum of two sets of
13 plans and specifications with each application when required by the building official for
14 enforcement of any provisions of this code.

15

16 (2) Drawings and specifications for footings and foundations shall bear the seal and
17 signature of a professional engineer ~~or architect~~ registered in Colorado or an architect
18 licensed in Colorado and be designed as specified in Chapter 18 of the building code for
19 all occupancies.

20 Exceptions:

- 21 (a) Detached structures not intended for human occupancy;
- 22 (b) Additions to existing detached dwellings not exceeding 150 square feet.

23

24 (q) Section 113, "Board of Appeals," is repealed and reenacted to read:

25 **113 Appeals and advisory opinions.**

....

(g) The board or hearing officer has no authority to interpret Chapter 1 (the
administrative requirements) ~~and Chapter 34~~ of this code except as expressly
provided in this section, nor, because this code sets minimum standards, to
waive any requirement of this code.

....

(x) Section 202, "Definitions," is amended by the addition of the following new definitions:

MULTIPLE FIXTURE ALL GENDER TOILET FACILITY. A toilet facility consisting of
multiple water closet compartments and associated lavatories which serve all genders.

PERMIT ISSUANCE. The date that the approved building permit is paid for and received
back from the city manager by the applicant or a representative of the applicant.

(y) A new Subsection 6 is added to Section 708.1, "General," to read:

6. Walls separating marijuana growing, processing, and dispensing occupancies from adjacent occupancies.

(z) A paragraph is added to Section (F) 903.2, "Where required," to read:

The maximum fire area without an automatic sprinkler system shall be determined by Section 903.2 of the fire code.

(aa) Section ~~907.2.10~~~~907.2.11~~, "Single- and multiple-station smoke alarms," is amended by the addition of the following subsections:

~~907.2.10.8~~~~907.2.11.5~~ Alterations, repairs, and enlargements. (1) When buildings or structures, or portions of buildings or structures, classified as Group R are altered, repaired, or enlarged and the work requires a building permit, or (2) when one or more sleeping rooms are added or created, smoke alarms shall be installed for each dwelling or sleeping unit affected by such work in accordance with Section ~~907.2.10~~~~907.2.11~~, except as provided otherwise in this section or its subsections.

Exceptions:

1. Work involving solely the exterior surfaces of the building or structure, such as replacement of roofing or siding or the addition of a porch or deck.
2. Installation, alterations, and repairs of plumbing or mechanical systems.

~~907.2.10.8~~~~907.2.11.5.1~~ Exception to interconnection. Section ~~907.2.10.5~~~~907.2.11.3~~ applies except that interconnection of smoke alarms in existing areas shall not be required where alterations and repairs do not include removal of interior wall and ceiling finishes exposing the structure unless an attic, crawlspace, or basement is available to provide access for interconnection without removal of interior finishes.

~~907.2.10.8~~~~907.2.11.5.2~~ Exception to power source. Section ~~907.2.10.6~~~~907.2.11.4~~ applies except that (1) smoke alarms may be battery-operated when installed in a building without commercial power and (2) hard-wired smoke alarms shall not be required in existing areas where alterations or repairs do not result in the removal of interior wall and ceiling finishes exposing the structure unless an attic, crawlspace, or basement is available to provide access for hard wiring without removal of interior finishes.

(**) **Section 1109.2.2, "Water closet compartment,"** is repealed and reenacted to read:

1109.2.2 Water closet compartment. Where water closet compartments are provided in a toilet room or bathing room, at least one wheelchair-accessible compartment shall be provided. Where the combined total water closet compartments and urinals provided in a toilet room or bathing room is eleven or more, at least one ambulatory-accessible water closet compartment shall be provided in addition to the wheelchair-accessible compartment.

(bb) Section ~~1404.31~~405.3, "Vapor retarders," is amended by adding two exceptions:

4. Commercial and multiple-residence buildings complying with the 2020 City of Boulder2012 International Energy Conservation Code Section ~~C402.5~~C402.4, Air leakage (mandatory).

5. Residential buildings complying with the 2020 City of Boulder2012 International Energy Conservation Code Section R402.4, Air leakage (mandatory).

(cc) Section 1505.1, "General," is repealed and reenacted to read:

1505.1 General. All roof assemblies and roof coverings required to be listed by this section shall be tested in accordance with ASTM Standard E 108 or UL Standard 790. Class A roofs and the exceptions noted in Section 1505.3 for class B roofs as described in this Chapter 15 are the only roof assemblies and roof coverings allowed to be installed on any new or existing building within the city of Boulder. Wood shakes, wood shingles, and wood roof covering materials are prohibited except as provided in Section 10-5-5, "Wood Roof Covering Materials Prohibited," B.R.C. 1981, for certain minimal repairs.

(dd) Section 1608.1, "General," is repealed and reenacted to read:

1608.1 General. The minimum roof snow load shall be thirty pounds per square foot, but the design roof load shall not be less than that determined by Section 1607.

(ee) Section 1608.2, "Ground snow loads," is ~~deleted~~repealed and reenacted to read:

Ground snow loads shall be 40 pounds per square foot, $P_g = 40 \text{ lb/ft}^2$

(ff) Section 1609.3, "Basic wind speed," is amended by adding the following sentence:but not Section 1609.3.1 and Table 1609.3.1, is repealed and reenacted to read:

~~1609.3 – Basic wind speed.~~

The ~~basic~~ultimate design wind speed, V_{ult} , in mph, for the determination of wind loads shall be determined by Table 1609.3. based on the wind zone and building risk category ~~130~~.

TABLE 1609.3. ^a

BASICULTIMATE DESIGN WIND SPEED

BasicUltimate Design Wind Speed (V_{ult}) in MPH according to Wind Zone and Building Risk Category			
Wind Zone	Risk Category I	Risk Category II	Risk Category III and <u>IV</u> VI
East of Broadway	140	150	160
West of Broadway	155	165	175

^a These standards were developed by Jon A. Peterka in the Colorado Front Range Gust Map—

ASCE 7-167-10 Compatible dated November 18, 2013.

(gg) Sections ~~1612.2, 1612.3 and 1612.4~~1612.3, 1612.4 and 1612.5 are repealed.

(hh) Section 1705, "Required Special Inspections and Tests~~verification and inspection~~," is amended by adding the following subsection:

1705.191705.18 Special inspection for medical gas systems. Medical gas systems shall be tested as detailed in Chapter 12, "Special Piping and Storage Systems," of the City of Boulder Plumbing Code.

(**) A new exception 5 is added to Section 2902.2, **Separate Facilities:**

5. Separate facilities are not required when multiple fixture all gender facilities are provided. Multiple fixture all gender facilities are not required; they are an alternative to be determined by the property owner or the owners' agent.

(**) 2902.4 "Signage". is repealed and reenacted to read:

2902.4 Signage. Required public facilities shall be provided with signs that designate which genders the facility accommodates as required by section 2902.2. Signs shall be readily visible and located near the entrance to each toilet facility. Signs for accessible toilet facilities shall comply with Section 1111.

Exception: Toilet facilities with only one water closet shall not be identified for exclusive use by any gender and shall be deemed to meet the requirements of this section. Signage shall be provided in accordance with Section 2902.4.2.

2902.4.1 Directional signage. Directional signage indicating the route to the required public toilet facilities shall be posted in a lobby, corridor, aisle or similar space, such that the sign can be readily seen from the main entrance to the building or tenant space.

2902.4.2 All gender signage. Single-user toilet facilities provided in accordance with Section 2902.1.2, and family or assisted-use toilet facilities provided in accordance with Section 2902.2.1, shall be provided with signs which clearly indicate the facilities are available for use by all genders.

2902.4.2.1 Existing facilities. After December 31, 2020, all existing single-user toilet facilities and family or assisted-use toilet facilities, shall be provided with signage in accordance with Section 2902.4.2.

(ii) Section J103, "Permits required," of Appendix J, "GRADING," is amended by adding the following subsections:

....

(**) A new Chapter 36 is added to read:

1 **CHAPTER 36. COMMERCIAL CONSTRUCTION WASTE RECYCLING.**

2 **3601.1 Commercial construction recycling requirement.**

3 An applicant for a building permit to construct a new building shall demonstrate all recyclable wood, metal and cardboard materials were donated, reused or recycled.

4 **3601.1.1 Reporting.**

5 Within sixty days following the completion of the project and prior to final inspection, the applicant shall submit documentation to the city manager which proves that all recyclable wood, metal and cardboard was donated, reused, or recycled. The documentation shall consist of a final
6 completed waste diversion report in a form as prescribed by the city manager showing the tonnage of materials salvaged for recycling and reuse, supported by original weight receipts or
7 other waste documentation that reasonably verifies that materials generated from the site have been accepted for recycling, reuse, salvage or otherwise diverted. For construction debris for
8 which weighing is not practical due to size, lack of scales at the facility, or other considerations, a volumetric measurement shall be used. For conversion of volumetric measurements to weight,
9 the applicant shall use the standardized conversion rates established by the city manager.

10 **3601.2 Commercial deconstruction waste recycling.**

11 An applicant for a full demolition shall adhere to the requirements of 3601.2.1 through 3601.2.5.

12 **3601.2.1 Diversion requirements.**

13 The applicant shall divert from landfills at least seventy-five percent of the waste tonnage of demolition debris generated from the project by using recycling, reuse, and diversion programs. The city manager may modify this requirement if the applicant demonstrates it is unfeasible as
14 set forth in section 3601.2.2. The materials diverted must also include at least three of the material types set forth in the in the deconstruction plan form established by the city manager.

15 **3601.2.2 Information required before issuance of demolition permit.**

16 The applicant shall submit a properly completed deconstruction plan in a form as established by the city manager. The applicant must propose to divert at least three of the material types
17 identified by the city manager in the deconstruction plan form. No building permit or demolition permit shall be issued prior to the approval of the deconstruction plan by the city manager. In
18 estimating the volume or weight of materials identified in the deconstruction plan, the applicant shall use the standardized conversion rates established by the city manager. The city manager
19 may modify the required diversion percentage if the applicant demonstrates in the deconstruction plan that the percentage is not feasible because the maximum weight of materials that can be
20 reused or recycled is less than the required diversion rate, or due to the presence of materials that are unable to be diverted due to special waste conditions such as environmental hazards.

21 **3601.2.3 Administrative fee and deposit required.**

22 Prior to issuance of a permit for a full demolition or level 4 alteration as defined in the 2020 City
23 of Boulder Energy Conservation Code, the applicant shall post a cash deposit and pay the administrative fee described in Section 4-20-72, B.R.C. 1981. The cash deposit shall be one
24 dollar per square foot of the demolition or work area of the alteration as identified in the permit application, or \$1,500, whichever is greater.

1 **3601.2.4 Reporting.**

2 Within sixty days following the completion of the demolition, the applicant shall submit
3 documentation to the city which proves compliance with the requirements of sections 3601.2.1
4 and 3601.2.2. The documentation shall consist of a final completed waste diversion report in a
5 form established by the city manager showing the tonnage of materials salvaged for recycling
6 and reuse, supported by original weight receipts or other waste documentation that reasonably
7 verifies that materials generated from the site have been accepted for recycling, reuse, salvage or
8 otherwise diverted at the required diversion percentage. The documentation shall further
9 demonstrate that the diverted materials include at least three material types. For demolition
10 debris for which weighing is not practical due to size, lack of scales at facility, or other
11 considerations, a volumetric measurement shall be used. For conversion of volumetric
12 measurements to weight, the applicant shall use the standardized conversion rates established by
13 the city manager.

14 **3601.2.5 Deposit refunded or forfeited.**

15 No applicant shall fail to comply with 3601.2.1 through 3601.2.4. The deposit shall be refunded
16 to the applicant in proportion to the ratio of the actual diversion rate to the required diversion
17 rate. If the required diversion percentage is not fully complied with, the remainder of the deposit
18 shall be forfeited to the city as a civil penalty for failure to comply with the requirements of this
19 chapter, after notice and an opportunity for hearing under the procedures prescribed by Chapter
20 1-3, "Quasi-Judicial Hearings," B.R.C. 1981. The city manager may adjust the amount of the
21 refund or forfeiture where the applicant demonstrates that the required diversion percentage was
22 not feasible based on the factors identified in 3601.2.2 for modification of the diversion
23 percentage. The forfeiture remedy is cumulative and is in addition to any other action the city
24 manager is authorized to take, including suspension or revocation of a building contractor license
25 or prosecution in the municipal court. Each 2,500 square feet of the demolition or alteration shall
give rise to a separate violation, and each violation is subject to a maximum fine of \$2,500.

....

Section 5. Chapter 10-5.5, "Residential Building Code," B.R.C. 1981, is amended as follows:

10-5.5-1. - Legislative Intent.

The purpose of this chapter is to protect the public health, safety, and general welfare by regulating the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal, and demolition of detached one- and two-family dwellings and townhouses, not more than three stories above grade in height with a separate means of egress, and their accessory structures. The city council hereby adopts the ~~2018~~²⁰¹² edition of the *International Residential Code* with certain amendments thereto found to be in the best interests of the city.

10-5.5-2. - Adoption of the International Residential Code With Modifications.

- (a) The ~~2018~~²⁰¹² edition of the International Residential Code of the International Code Council is hereby adopted by reference as the City of Boulder Residential Building Code

and has the same force and effect as though fully set forth in this chapter, except as specifically amended by the provisions of this chapter.

- (b) The Appendix chapters D, E, F, ~~G~~, H, J, K, ~~and P, Q, R and S~~ and sections contained therein are adopted.

....

- (f) A new sentence is added to the end of Section R301.1, "Application," stating:
Structural calculations shall be submitted to the building official, demonstrating how the proposed construction meets the applicable requirements for design loads ~~supports must be provided to the building official.~~

- (g) The climatic and geographic design criteria applicable to Table R301.2-(1) are:

Ground ~~s~~ Snow Load = ~~thirty~~ 40 pounds per square foot, $P_g = 40 \text{ lb/ft}^2$ ~~with a minimum Roof Snow Load of 30 pounds per square foot.~~

Three-second wind gust velocity = ~~150~~ 120 mph east of Broadway, ~~165~~ 130 mph west of Broadway

Topographic effects = Yes

Special wind region = Yes

Windborne debris zone = No

Seismic Design Category = B

Weathering = severe

Frost line depth = 32 inches

Termite = slight

Decay = none to slight

Winter Design Temp = 2 degrees Fahrenheit

Ice barrier underlayment required = NO

Flood Hazards = See Sections 9-3-3 through 9-3-9, B.R.C. 1981

Air freezing index = 459

Mean annual temp = 52.1

Elevation = 5385 feet

Latitude = 40 degrees

Winter Heating = 0 degrees Fahrenheit

Summer Cooling = 91 degrees Fahrenheit

Altitude Correction Factor = 0.821

Indoor Design Temperature = 72 degrees Fahrenheit

Design Temperature Cooling = 75 degrees Fahrenheit

Heating Temperature difference = 66 degrees Fahrenheit

Cooling Temperature difference = 18 degrees Fahrenheit

Wind Velocity Heating = 15

Wind Velocity Cooling = 7.5

Coincident Wet Bulb = 59 degrees Fahrenheit

Daily Range = High

Winter Humidity = 30%

1 Summer Humidity = 50%

- 2 (h) Section R301.2.4, "Floodplain construction": A new sentence is added to the end of the
3 section reading "All work on structures in the scope of this code shall also meet the
 requirements of Sections 9-3-29-3-3 through 9-3-9, B.R.C 1981."

4

- 5 (j) The first sentence of the Exception to Item 2 in Section R302.2.4~~R302.2.2~~, "Parapets for
6 townhouses," is amended by deleting "a minimum class C roof covering" and replacing it
 with "a minimum Class B roof covering."

- 7 (k) Section R302.5.1, "Opening protection," is repealed and reenacted to read:

8 **R302.5.1 Opening protection.** Openings from a garage directly into a room used for
9 sleeping purposes shall not be permitted. Other openings between the garage and residence
 shall be equipped with weather-stripped, solid wood doors not less than 1 and 3/8 inches (35
 mm) in thickness, solid or honeycomb-core steel doors not less than 1 and 3/8 inches (35
 mm) in thickness, or 20-minute fire-rated doors, equipped with a self-closing device.

- 10 (l) — Section R309.5, "Fire sprinklers," is deleted.

- 11 (m) Section R311.2, "Egress doors," is repealed and reenacted to read:

12 **R311.2 Egress doors.** At least one egress door shall be provided for each dwelling unit. The
13 egress door shall be side hinged, and shall provide a minimum clear width of 32 inches (813
14 mm) when measured between the face of the door and the stop, with the door open 90
 degrees (1.57 rad). The minimum clear height of the door opening shall not be less than 78
 inches (1981 mm) in height measured from the top of the threshold to the bottom of the stop.

15

- 16

(p) — Section R313.1, "Townhouse automatic fire sprinkler systems," is repealed and reenacted
 to read:

17 ~~**R313.1 Townhouse automatic fire sprinkler systems.** Automatic fire sprinkler systems
18 shall be installed in townhouses in accordance with the requirements of Section 903.2.8 of
 the City of Boulder Fire Code.~~

- 19

(q) — Section R313.2, "One and two family dwelling automatic fire sprinkler systems," is
 repealed and reenacted to read:

20 ~~**R313.2 One and two family dwelling automatic fire sprinkler systems.** Automatic
21 sprinkler systems shall be installed in one and two family dwellings in accordance with the
 requirements of Section 903.2.8 of the City of Boulder Fire Code.~~

22

- 23 (t) A new Section R324 Construction Waste Management is added to read:

24 **SECTION R324 CONSTRUCTION WASTE MANAGEMENT**

25 **R324.1 Construction Waste Recycling.** An applicant for a building permit for a new
 dwelling unit or an addition to an existing dwelling unit shall demonstrate all recyclable
 wood, metal, and cardboard materials will be donated, reused, or recycled.

1 **R324.2 Deconstruction Management.** An applicant proposing to demolish more than 50
2 percent of exterior walls shall demonstrate through a deconstruction plan that 100 percent of
3 concrete and asphalt and at least 65 percent of other the existing building materials, by
weight, from the deconstruction, excluding concrete and asphalt, will be diverted from the
landfill for reuse or recycling.

4 A new Section R328, Construction Waste Management, is added to read:

5 **SECTION R328 CONSTRUCTION WASTE MANAGEMENT**

6 **R328.1 Residential construction waste recycling.** An applicant for a building permit to
construct a new dwelling unit shall demonstrate all recyclable wood, metal and cardboard
7 materials were donated, reused or recycled.

8 **R328.1.1 Reporting.** Within sixty days following the completion of the project and prior to
final inspection, the applicant shall submit documentation to the city manager which proves
9 that all recyclable wood, metal and cardboard was donated, reused, or recycled. The
documentation shall consist of a final completed waste diversion report in a form as
10 prescribed by the city manager showing the tonnage of materials salvaged for recycling and
reuse, supported by original weight receipts or other waste documentation that reasonably
11 verifies that materials generated from the site have been accepted for recycling, reuse,
salvage or otherwise diverted. For construction debris for which weighing is not practical
12 due to size, lack of scales at the facility, or other considerations, a volumetric measurement
shall be used. For conversion of volumetric measurements to weight, the applicant shall use
13 the standardized conversion rates established by the city manager.

14 **R328.2 Residential deconstruction waste recycling.** An applicant for a full demolition or
level 4 alteration as defined in the *2020 City of Boulder Energy Conservation Code* shall
15 adhere to the requirements of R328.2.1 through R328.2.5.

16 **R328.2.1 Diversion requirements.** The applicant shall divert from landfills at least seventy-
five percent of the waste tonnage of demolition debris generated from the project by using
17 recycling, reuse, and diversion programs. The city manager may modify this requirement if
the applicant demonstrates it is unfeasible as set forth in section R328.2.2. The materials
18 diverted must also include at least three of the material types set forth in the in the
deconstruction plan form established by the city manager.

19 **R328.2.2 Information required before issuance of demolition and/or building permit.**
20 The applicant shall submit a properly completed deconstruction plan in a form as established
by the city manager. The applicant must propose to divert at least three of the material types
21 identified by the city manager in the deconstruction plan form. No building permit or
demolition permit shall be issued prior to the approval of the deconstruction plan by the city
22 manager. In estimating the volume or weight of materials identified in the deconstruction
plan, the applicant shall use the standardized conversion rates established by the city
23 manager. The city manager may modify the required diversion percentage if the applicant
demonstrates in the deconstruction plan that the percentage is not feasible because the
24 maximum weight of materials that can be reused or recycled is less than the required
diversion rate, or due to the presence of materials that are unable to be diverted due to
25

1 special waste conditions such as environmental hazards.

2 **R328.2.3 Administrative fee and deposit required.** Prior to issuance of a permit for a full
3 demolition or level 4 alteration as defined in the 2020 City of Boulder Energy Conservation
4 Code, the applicant shall post a cash deposit and pay the administrative fee described in
5 section 4-20-72, B.R.C. 1981. The cash deposit shall be one dollar per square foot of the
6 demolition or work area of the alteration as identified in the permit application, or \$1,500,
7 whichever is greater.

8 **R328.2.4 Reporting.** Within sixty days following the completion of the demolition or
9 alteration, the applicant shall submit documentation to the city which proves compliance
10 with the requirements of sections R328.2.1 and R328.2.2. The documentation shall consist
11 of a final completed waste diversion report in a form established by the city manager
12 showing the tonnage of materials salvaged for recycling and reuse, supported by original
13 weight receipts or other waste documentation that reasonably verifies that materials
14 generated from the site have been accepted for recycling, reuse, salvage or otherwise
15 diverted at the required diversion percentage. The documentation shall further demonstrate
16 that the diverted materials include at least three material types. For demolition debris for
17 which weighing is not practical due to size, lack of scales at facility, or other considerations,
18 a volumetric measurement shall be used. For conversion of volumetric measurements to
19 weight, the applicant shall use the standardized conversion rates established by the city
20 manager.

21 **R328.2.5 Deposit refunded or forfeited.** No applicant shall fail to comply with R328.2.1
22 through R328.2.4. The deposit shall be refunded to the applicant in proportion to the ratio of
23 the actual diversion rate to the required diversion rate. If the required diversion percentage is
24 not fully complied with, the remainder of the deposit shall be forfeited to the city as a civil
25 penalty for failure to comply with the requirements of this chapter, after notice and an
26 opportunity for hearing under the procedures prescribed by Chapter 1-3, "Quasi-Judicial
27 Hearings," B.R.C. 1981. The city manager may adjust the amount of the refund or forfeiture
28 where the applicant demonstrates that the required diversion percentage was not feasible
29 based on the factors identified in R328.2.2 for modification of the diversion percentage. The
30 forfeiture remedy is cumulative and is in addition to any other action the city manager is
31 authorized to take, including suspension or revocation of a building contractor license or
32 prosecution in the municipal court. Each 2500 square feet of the demolition or alteration
33 shall give rise to a separate violation, and each violation is subject to a maximum fine of
34 \$2,500.

....

35 (v) A new Section R401.5, "Placement of backfill," is added to read:

36 **R401.5 Placement of backfill.** The provisions of Section ~~1804.3~~1804.2 of the Building
37 Code of the City of Boulder shall apply to the placement of backfill.

....

38 (cc) Chapter 11, "Energy Efficiency." Sections N1101 through N1105 are repealed. A new
39 Section N1101 is added to read:

1 **N1101 Scope.** Regulations concerning the design and construction of buildings for the
2 effective use of energy and requirements for green building practices shall be administered
3 in accordance with the 20202017 City of Boulder Energy Conservation Code as adopted by
Chapter 10-7, "Energy Conservation Code," B.R.C. 1981.

....

4 (gg) Section M1601.4.10~~M1601.4.9~~, "Flood hazard areas," is repealed and reenacted to read:

5 **M1601.4.10~~M1601.4.9~~ Flood hazard areas.** In floodplains, as established in Title 9, Land
6 Use Code, B.R.C. 1981, duct systems shall be located or installed in accordance with the
provisions of Title 9, Land Use Code, B.R.C. 1981.

7 (hh) A new sentence is added to Section M1602.2~~M1602.1~~, "Return air," to read:

8 Within individual dwelling units there shall be at least one return air opening on each floor.

....

9 (kk) Chapter 23 is renamed to read "Solar Energy Systems and Solar Ready Buildings."

10 (ll) A new Section M2303, "Solar photovoltaic power systems," is added to read:

11 **M2303 Solar photovoltaic power systems.** Solar photovoltaic power systems shall also
meet the provisions of Section E3804, as amended.

12 (mm) A new Section M2304, "Requirements for Solar Ready Buildings," is added to read:

13 **M2304.1 General.** All new buildings shall comply with the requirements of this Section
M2304.1. This section shall not apply to additions, alterations or repairs to existing
buildings.

14 **M2304.1.1 Solar Zone.** Solar Zones shall be clearly indicated on the construction
documents.

15 **M2304.1.1.1 Location and Size of Solar Zones.** The solar zone shall have a minimum total
16 area as described below. The solar zone shall comply with access, pathway, smoke
ventilation, and spacing requirements as specified in the Boulder Revised Code. The solar
17 zone total area shall be comprised of one or more rectangular areas that are no less than 80
square feet and no side of any rectangular area shall be less than five feet in length.
The solar zone shall be located:

- 18 1. On the roof or overhang of the building;
19 2. On the roof or overhang of another structure located within 250 feet of the building on
the same parcel or lot;
20 3. On covered parking installed with the building project, or
4. On a façade that is less than 15 degrees greater or less than true south.

21 The solar zone shall have a total area of no less than 40 percent of the total roof area, as
measured by the area of the roof planes. The following roof areas can be excluded when
22 calculating the total roof area of the building:

- 23 1. Roof areas with a permanently installed domestic solar water heating system.
24 2. Roof areas where the annual solar access is less than 70 percent. For the purpose of this
code, solar access means the ratio of solar insolation including shade to the solar insolation
without shade. Shading from obstructions located on the roof or any other part of the
building shall not be included in the determination of annual solar access.

25 **Exception:** Solar zones are not required in:

1. Buildings with a permanently installed solar electric system having a nameplate DC power rating, measured under standard test condition of no less than one watt per square foot of roof area.

2. Buildings where the roof is designed and approved to be used for vehicular traffic or parking or for a heliport.

M2304.1.1.2 Orientation. All sections of the solar zone located on steep slope roofs shall be oriented between 90 degrees and 270 degrees of true north.

M2304.1.1.3 Shading.

1. No obstructions, including but not limited to, vents, chimneys, architectural features, and roof mounted equipment, shall be located in the solar zone.

2. Any obstruction located on the roof or any other part of the building that projects above a solar zone shall be located at least twice the distance, measured in the horizontal plane, of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane.

Exception: Any roof obstruction, located on the roof or any other part of the building, that is oriented north of all points on the solar zone.

M2304.1.1.4 Structural Design Loads on Construction Documents. For areas of the roof designated as solar zone, the structural design loads for roof dead load and roof live load shall be clearly indicated on the construction documents.

NOTE: The inclusion of any collateral loads for future solar energy systems is not required.

M2304.1.2 Interconnection Pathways. The construction documents shall indicate a location for inverters and metering equipment and a pathway for routing of conduit for the solar zone to the point of interconnection with the electrical service.

M2304.1.3. Documentation. A copy of the construction documents or a comparable document indicating the information from Sections M2304.1.1 through M2304.1.2 shall be provided to and maintained by the building owner. The building owner shall provide a copy of the construction documents or a comparable document indicating the information from Sections M2304.1.1 through M2304.1.2 to any purchasers and subsequent owners of the building or any part thereof.

M2304.1.4. Main Electrical Service Panel.

1. The main electrical service panel shall have a minimum busbar rating of no less than 200 amps.

2. The main electrical service panel shall have a reserved space to allow for the installation of double pole circuit breakers for a future solar electric installation.

A. Location. The reserved space shall be positioned at the opposite (load) end from the input feeder location or main circuit location.

B. Marking. The reserved spaces shall be permanently marked as "For Future Solar Electric."

....

(vv) Section P3009, "Subsurface Landscape Irrigation Systems~~Gray water recycling systems,~~" is deleted in its entirety.

(ww) Section P3101.5, "Flood resistance," is repealed and reenacted to read:

P3101.5 Flood resistance. In floodplains, as established in Title 9, Land Use Code, B.R.C. 1981, vents shall be located or installed in accordance with the provisions of Title 9, Land

Use Code, B.R.C. 1981.

(xx) — A new Section E3804, "Solar photovoltaic power systems," is added to read:

E3804 Solar photovoltaic power systems. Solar photovoltaic power systems shall meet the provisions of sections 605.11 through 605.11.3.2.3 of the City of Boulder Fire Code.

(yy) — New Subsections E3901.13, "Electric vehicle charging requirements for new construction," and E3901.14, "Electric vehicle charging requirements for renovations," are added to read:

E3901.13 Electric vehicle charging requirements for new construction. Every new dwelling unit in a detached one- and two-family dwelling or townhouse shall include the following in at least one of the provided off-street parking spaces:

1. — A 240-volt dedicated electric vehicle charging receptacle outlet, and
2. — A 120-volt dedicated electric vehicle charging receptacle outlet.

The electric vehicle charging receptacle outlets shall be labeled as an electric vehicle outlet.

E3901.14 Electric vehicle charging requirements for renovations. For every dwelling unit where a garage is converted to habitable space, at least one 120-volt or 240-volt dedicated electric vehicle charging receptacle outlet shall be provided adjacent to at least one of any provided parking spaces.

Exception: A dedicated charging outlet is not required if off-street parking is not provided.

The electric vehicle charging receptacle outlets shall be labeled as an electric vehicle outlet.

(zz) — Section E4209.3, "Accessibility," is amended by adding the following to the end of the section:

Equipment shall be accessed by a panel with a minimum size of 12 inches (305 mm).

(aaa) Appendix F, "Radon Control Method," is hereby repealed and reenacted to read as follows:

APPENDIX F RADON CONTROL METHOD

The requirements of Appendix F to the 20182015 edition of the *International Residential Code* of the International Code Council shall hereby be complied with which appendix is hereby adopted by reference as part of the City of Boulder Residential Code and have the same force and effect as though fully set forth in this subsection, ~~except as specifically amended by the provisions of this subsection.~~

(bbb) — Section AJ102.5, "Flood hazard areas," is repealed and reenacted to read:

AJ102.5 Flood hazard areas. Work performed in existing buildings located in a floodplain, as established by Title 9, Land Use Code, B.R.C. 1981, shall be done in accordance with the applicable provisions of Title 9, Land Use Code, B.R.C. 1981.

(**) Appendix P, "Sizing of Water Piping System," is hereby repealed and reenacted to read as follows:

APPENDIX P SIZING OF WATER PIPING SYSTEM

The requirements of Appendix P to the 2018 edition of the *International Residential Code* of the International Code Council shall hereby be complied with which appendix is hereby

1 adopted by reference as part of the City of Boulder Residential Code and have the same force
2 and effect as though fully set forth in this subsection, except as specifically amended by the
3 provisions of this subsection.

3 (**) Appendix Q, "Tiny Houses," is hereby repealed and reenacted to read as follows:

4 APPENDIX Q
5 TINY HOUSES

5 The requirements of Appendix Q to the 2018 edition of the *International Residential*
6 *Code* of the International Code Council shall hereby be complied with which appendix is hereby
7 adopted by reference as part of the City of Boulder Residential Code and have the same force
8 and effect as though fully set forth in this subsection, except as specifically amended by the
9 provisions of this subsection.

8 AQ101.1 "Scope" is hereby repealed and reenacted to read as follows:

9 This appendix shall be applicable to tiny houses used as single dwelling units. Tiny houses shall
10 comply with this code except as otherwise stated in this appendix. Tiny houses shall be on
11 permanent foundations and permanently connected to utilities, as required by this code. Tiny
12 houses constructed off-site shall be inspected and approved for compliance with this code, by
13 third party special inspectors pre-approved by the building official. The building official may
14 use the provisions of the City of Boulder Building Code to administer the requirements for
15 approving special inspectors.

13 (eee***) A new footnote notation "b" is added to the heading and a new footnote "b" is
14 added to AP Table AP103.3(2), "Load values assigned to fixtures," reading:

- 15 b. For the purpose of determining the largest instantaneous demand required in order to
16 size a water meter, ~~or for determining the amount of the plant investment fee,~~ this table
17 is repealed and replaced by Chapter 11-1-35, "Meter Size Requirements," the Fixture
18 Unit/GPM Demand Chart and PIF Computation sheet found at Appendix A to Chapter
19 11-1, "Water Utility," B.R.C. 1981.

18 Section 6. Tile 10 is amended to add a new Chapter 10-5.6, "Existing Building Code,"
19 B.R.C. 1981 to read as follows:

20 **10-5.6-1 Legislative Intent.**

21 The purpose of this chapter is to protect the public health and safety by regulating the
22 repair, alteration, change of occupancy, addition to and relocation of existing buildings in the
23 city. This chapter is intended to encourage the use and reuse of existing buildings while requiring
24 reasonable upgrades and improvements. The city council hereby adopts the 2018 edition of the
25 International Existing Building Code with certain amendments, additions and deletions found to
26 be in the best interests of the city.

24 **10-5.5-2 – Adoption of the International Existing Building Code With Modifications.**

25 (a) The 2018 edition of the *International Existing Building Code* of the International Code
26 Council is hereby adopted by reference as the City of Boulder Existing Building Code and has

1 the same force and effect as though fully set forth in this chapter, except as specifically amended
2 by the provisions of this chapter. This code shall be administered in accordance with Chapter 1,
3 "Administration," of the International Building Code as adopted, with amendments, by Section
4 10-5-2, "Adoption of International Building Code With Modifications," B.R.C. 1981.

5 (b) Section 104.2.1, Determination of substantially improved or substantially damaged
6 existing buildings and structures in flood hazard areas, is amended by the addition of a new
7 sentence to read: "In floodplains, as established in Title 9, Land Use Code, all work on
8 structures in the scope of this code shall also be in accordance with the provisions of Title 9,
9 Land Use Code, B.R.C. 1981."

10 (c) Section 104.10.1, "Flood hazard areas," is repealed and reenacted to read:

11 In floodplains, as established in Title 9, Land Use Code, all work on structures in the
12 scope of this code shall also be in accordance with the provisions of Title 9, Land Use
13 Code, B.R.C. 1981.

14 (d) Section 109.3.3, "Lowest floor elevation," is repealed and reenacted to read:

15 In floodplains, as established in Title 9, Land Use Code, all work on structures in the
16 scope of this code shall also be in accordance with the provisions of Title 9, Land Use
17 Code, B.R.C. 1981.

18 (e) Section 301.3 Alteration, addition or change of occupancy, is amended by replacing the
19 exception with the following:

20 **Exception:**

21 Subject to the approval of the code official, alterations complying with the laws in
22 existence at the time the building or the affected portion of the building was built shall be
23 considered in compliance with the provisions of this code. New structural members
24 added as part of the alteration shall comply with the International Building Code. This
25 exception shall not apply to alterations that constitute substantial improvement in flood
hazard areas, which shall comply with Section 503.2, 701.3 or 1301.3.3; and in
accordance with the provisions of Title 9, Land Use Code, B.R.C. 1981. This exception
shall not apply to the structural provisions of Chapter 5 or to the structural provisions of
Sections 706, 806 and 906.

(f) Section 401.3 "Flood hazard areas" is repealed and reenacted to read:

In floodplains, as established in Title 9, Land Use Code, all work on structures in the
scope of this code shall also be in accordance with the provisions of Title 9, Land Use
Code, B.R.C. 1981.

(g) Section 405.2.5 "Flood hazard areas" is repealed and reenacted to read:

In floodplains, as established in Title 9, Land Use Code, all work on structures in the
scope of this code shall also be in accordance with the provisions of Title 9, Land Use
Code, B.R.C. 1981.

(h) Section 502.3 "Flood hazard areas" is repealed and reenacted to read:

In floodplains, as established in Title 9, Land Use Code, all work on structures in the scope of this code shall also be in accordance with the provisions of Title 9, Land Use Code, B.R.C. 1981.

(i) Section 503.2 Flood hazard areas is repealed and reenacted to read:

In floodplains, as established in Title 9, Land Use Code, all work on structures in the scope of this code shall also be in accordance with the provisions of Title 9, Land Use Code, B.R.C. 1981.

(j) Section 507.3 “Flood hazard areas” is repealed and reenacted to read:

In floodplains, as established in Title 9, Land Use Code, all work on structures in the scope of this code shall also be in accordance with the provisions of Title 9, Land Use Code, B.R.C. 1981.

(k) Section 701.3 “Flood hazard areas” is repealed and reenacted to read:

In floodplains, as established in Title 9, Land Use Code, all work on structures in the scope of this code shall also be in accordance with the provisions of Title 9, Land Use Code, B.R.C. 1981.

(l) Section 1103.3 “Flood hazard areas” is repealed and reenacted to read:

In floodplains, as established in Title 9, Land Use Code, all work on structures in the scope of this code shall also be in accordance with the provisions of Title 9, Land Use Code, B.R.C. 1981.

(m) Section 1201.4 “Flood hazard areas” is repealed and reenacted to read:

In floodplains, as established in Title 9, Land Use Code, all work on structures in the scope of this code shall also be in accordance with the provisions of Title 9, Land Use Code, B.R.C. 1981.

(n) Section 1301.3.3 “Compliance with flood hazard provisions” is repealed and reenacted to read:

1301.3.3 Compliance with flood hazard provisions.

In floodplains, as established in Title 9, Land Use Code, all work on structures in the scope of this code shall also be in accordance with the provisions of Title 9, Land Use Code, B.R.C. 1981.

(o) Section 1402.6 “Flood hazard areas” is repealed and reenacted to read:

If relocated or moved into a flood hazard area, as established in Title 9, Land Use Code, all work on structures in the scope of this code shall also be in accordance with the provisions of Title 9, Land Use Code, B.R.C. 1981.

(p) Section 803.2.2 “Groups A, B, E, F-1, H, I, M, R-1, R-2, R-4, S-1 and S-2” is repealed and reenacted to read:

—In buildings with occupancies in Groups A, B, E, F-1, H, I, M, R-1, R-2, R-4, S-1 and S-2, work areas that have exits or corridors shared by more than one tenant or that have exists or corridors serving an occupant load greater than 30 shall be provided with automatic sprinkler protection where both of the following conditions occur:

1
2 1. The work area is required to be provided with automatic sprinkler protection
3 in accordance with the International Building Code as applicable to new
4 construction.

5 2. The work area exceeds 50 percent of the floor area.

6 (q) Section 904.1.4 Other required automatic sprinkler systems, is repealed and reenacted to
7 read:

8 **904.1.4 Other required automatic sprinkler systems.**

9 In buildings and areas listed in Table 903.2.11.6 of the International Building Code,
10 works areas that have exits or corridors shared by more than one tenant or that have exits
11 or corridors serving an occupant load greater than 30 shall be provided with an automatic
12 sprinkler system under the following conditions:

13 1. The work area is required to be provided with an automatic sprinkler system in
14 accordance with the International Building Code applicable to new construction.

15 (r) APPENDIX B, "SUPPLEMENTARY ACCESSIBILITY REQUIREMENTS FOR
16 EXISTING BUILDINGS AND FACILITIES," and sections contained therein are adopted.

17 Section 7. Chapter 10-6, "Electrical Code," B.R.C. 1981, is amended as follows:

18

19 **10-6-2. - Adoption of the National Electrical Code With Modifications.**

20 (a) The current National Electrical Code of the National Fire Protection Association, as
21 currently adopted by the State of Colorado or as is from time to time modified, reenacted
22 or readopted by the State of Colorado is hereby adopted by reference as the City of
23 Boulder Electrical Code or electrical code and has the same force and effect as though
24 fully set forth in this chapter, except as specifically amended by the provisions of this
25 chapter.

26 (b) This code shall be administered in accordance with Chapter 1, Administration, of the
27 20182012 edition of the International Building Code and Appendix K, Administrative
28 Provisions, of the 20182012 edition of the International Building Code, as adopted,
29 respectively, with amendments, by Section 10-5-2, "Adoption of the International
30 Building Code With Modifications," B.R.C. 1981.

31 **10-6-3. — Electric Vehicle Charging Requirements for New Multifamily Dwellings.**

32 ~~Every newly permitted multifamily dwelling with more than twenty-five parking spaces shall~~
33 ~~include the following:~~

34 (a) — ~~Ten percent of parking spaces shall have one 240-volt and one 120-volt dedicated~~
35 ~~charging receptacle outlet.~~

36 (1) — ~~Accessible Spaces. Ten percent of accessible parking spaces, but in no case less than~~
37 ~~one accessible parking space, shall have one 240-volt and one 120-volt dedicated~~
38 ~~charging receptacle outlet. Parking in accessible spaces where electric vehicle supply~~
39 ~~equipment is installed shall not be limited to electric vehicles when no other comparable~~
40 ~~accessible space is available.~~

- (2) — Designation. Fifty percent of the parking spaces with a required dedicated charging receptacle outlet for electric vehicles shall be designated for electric vehicle charging.
- (b) — At least two parking spaces shall have a Level 2 dual port electric vehicle charging station. These two parking spaces with a Level 2 dual port electric vehicle charging station shall be designated for electric vehicle charging.

10-6-4. — Electric Vehicle Charging Requirements for New Commercial Structures and R-1 and R-2 Occupancies.

Every newly permitted commercial structure with more than twenty-five parking spaces and buildings serving a Group R-1 or R-2 occupancy shall comply with the following:

- (a) — Ten percent of parking spaces shall have one 240-volt and one 120-volt dedicated charging receptacle outlet.
- (1) — Accessible spaces. Ten percent of accessible parking spaces, but no less than one accessible parking space, shall have one 240-volt and one 120-volt dedicated charging receptacle outlet. Parking in accessible spaces where electric vehicle supply equipment is installed shall not be limited to electric vehicles when no other comparable accessible space is available.
- (2) — Designation. Fifty percent of the parking spaces with a required dedicated charging receptacle outlet for electric vehicles shall be designated for electric vehicle charging.
- (b) — In commercial structures with more than twenty-five parking spaces, at least two parking spaces shall have a Level 2 dual port electric vehicle charging station. These two parking spaces with a Level 2 dual port electric vehicle charging station shall be designated for electric vehicle charging.
- (c) — Buildings serving a Group R-1 or R-2 occupancy shall have a Level 2 dual port charging station in one percent of, but no less than two, parking spaces. Parking spaces with a required Level 2 dual port electric vehicle charging station shall be designated for electric vehicle charging.

10-6-35. - Arc-Fault Circuit-Interrupter Protection in Existing Dwelling Units.

When electrical panels or sub-panels are replaced or added in existing dwelling units, arc-fault circuit interrupter protection shall be provided for each replaced or added electrical panel or subpanel meeting the standards for new construction under the City of Boulder Electrical Code. The listed arc-fault circuit interrupter protective device shall be located at the origin of each circuit requiring protection.

Section 8. Chapter 10-7, "Energy Conservation Code," B.R.C. 1981 is amended as follows:

....

10-7-2. - Energy Conservation Code.

- (a) Council adopts by reference the *2017-2020 City of Boulder Energy Conservation Code* of the International Code Council which shall have the same force and effect as though fully set forth in the Boulder Revised Code, 1981. This chapter and the *2017-2020 City of Boulder Energy Conservation Code* shall be administered, applied, and interpreted in accordance with and as part of Chapter 10-5, "Building Code," B.R.C. 1981.

....

Section 9. Chapter 10-7.7, "Commercial and Industrial Energy Efficiency," B.R.C. 1981, is amended as follows:

....

10-7.7-4. - Required Lighting Upgrades.

(a) Within five years of the first reporting requirement, each owner shall:

(1) Replace or upgrade any interior lighting fixtures as necessary to meet lighting power allowances for interior lighting established in the ~~2017~~2020 *City of Boulder Energy Conservation Code*.

(2) Replace or upgrade any exterior lighting fixtures as necessary to meet lighting power allowances for exterior lighting established in the ~~2012~~2020 *International Energy Conservation Code*.

(3) Comply with requirements for automatic time switch control devices, occupancy sensors, and exterior lighting controls as necessary to meet the ~~2017~~2020 *City of Boulder Energy Conservation Code*.

....

10-7.7-8. - Large Industrial Campus.

....

(b) The owner of a large industrial campus shall:

(1) On or before June 1, 2019 and at least once every ten years thereafter, conduct an energy assessment that covers at least seventy-five percent of the total energy usage on the large industrial campus; and

(2) Within two years after each assessment, the owner must implement any measures recommended that are projected to produce monetary savings over a one-year period equal to or in excess of the cost of implementation, less the value of rebates.

(c) By June 1, 2025, each owner of a large industrial campus shall:

(1) Replace or upgrade any interior lighting fixtures necessary to meet the lighting power allowances for interior lighting established in the ~~2017~~2020 *City of Boulder Energy Conservation Code*.

(2) Replace or upgrade any exterior lighting fixtures as necessary to meet the lighting power allowances for exterior lighting established in the ~~2012~~2020 *International Energy Conservation Code*.

(3) Comply with the requirements for automatic time switch control devices, occupancy sensors, and exterior lighting controls as necessary to meet the ~~2017~~2020 *City of Boulder Energy Conservation Code*.

....

Section 10. Chapter 10-8, "Fire Code," B.R.C. 1981, is amended as follows:

1 **10-8-1. - Legislative Intent.**

2 The purpose of this chapter is to protect public health and safety by regulating the use,
3 condition, construction, alteration, and repair of property, structures, and occupancies in the city
4 in order to prevent the ignition and spread of fire and risk of harm to persons or property from
5 fire and other causes. The city council hereby adopts the 2018 ~~2012~~-edition of the *International*
6 *Fire Code* with certain amendments, additions, and deletions thereto found to be in the best
7 interests of the city. The standards provided in this chapter shall be used, insofar as they are
8 applicable, in determining whether a condition is hazardous, whether any work that has been
9 performed has been done in an approved manner, or whether any equipment is of an approved
10 type or quality, and in any determination concerning fire hazards and fire safety in the city
11 building code not specifically provided for therein.

12 **10-8-2. - Adoption of International Fire Code With Modifications.**

13 (a) The 2018 ~~2012~~-edition of the *International Fire Code* of the International Code Council
14 is adopted by reference as the City of Boulder Fire Code, and has the same force and
15 effect as though fully set forth in this chapter, except as specifically amended by the
16 provisions of this chapter.

17 (b) The Fire Code adopted by Subsection (a) of this section is amended in the following
18 places:

19 (1) Section 102.3 is repealed and reenacted to read:

20 **102.3 Change of use or occupancy.** No change shall be made in the use or occupancy
21 of any structure that would place the structure in a different division of the same group
22 or occupancy or in a different group of occupancies, unless such structure is made com
23 ply with the requirements of this code and the International Building Code.

24 (2) Section 103.1 is repealed and reenacted to read:

25 **103.1 Community Risk Reduction ~~Division of Fire Safety~~.**

A Community Risk Reduction ~~Division of Fire Safety~~ is established within the fire
department under the direction of the manager, which shall consist of such fire
department personnel as may be assigned thereto by the manager. The function of this
division shall be to assist the manager in the administration and enforcement of the
provisions of this code.

....

(5) Section 105.6 is repealed and reenacted to read:

105.6 Required operational permits. The fire code official may issue an operational
permit for the following operations:

(a) 105.6.14, Explosives

(b) 105.6.32 ~~105.6.30~~, Open Burning

(c) 105.6.36, Outdoor assembly events ~~105.6.32, Open Flames and Candles~~

(d) 105.6.38, Plant extraction systems

(ed) 105.6.40~~105.6.36~~, Pyrotechnic special effects material

(6) ~~Section 105.6.43 is amended by the addition of the following:~~

(f) 105.6.47~~105.6.43~~, Temporary membrane structures ~~and, tents and canopies. An~~
operational permit may be issued with the construction permit that will be
issued by the building official.

(67) Section 105.7 is repealed and reenacted to read:

105.7 Required construction permits. All construction permits will be issued by the building official. Community Risk Reduction ~~The Division of Fire Safety~~ will be the approving authority for the following:

(a) 105.7.1, Automatic fire-extinguishing systems;

(b) 105.7.7~~105.7.6~~, Fire alarm and detection systems and related equipment;

(c) 105.7.8~~105.7.7~~, Fire pumps and related equipment;

(d) 105.7.11 Gas detection systems

(e) 105.7.14 High-pile combustible storage

(f) 105.7.18 Plant indoor cultivation and extraction systems

(gd) 105.7.24~~105.7.15~~, Stand-pipe systems;

(78) Section 109~~108~~, "Board of Appeals," is repealed and reenacted to read:

109~~108~~ Appeals.

(a) Any appeal under this section shall be heard by the Board of Building Appeals established under Section 2-3-4, "Board of Building Appeals," B.R.C. 1981, unless the city manager determines, due to the nature of the issues in a particular appeal, to appoint a hearing officer under Section 1-3-5, "Hearings and Determinations," B.R.C. 1981.

....
(9) Section 110.1~~109.1~~, "Unlawful acts," is repealed and reenacted to read:

109.1~~110.1~~ Violations.

....
(10) Section 110.3.3~~109.3.3~~, "Prosecution of violations," is repealed.

(11) Section 110.4~~109.4~~, "Violation penalties," is repealed and reenacted to read:

110.4~~109.4~~ Abatement of violation. In addition to the imposition of the penalties described in Section 109.1~~110.1~~, "Violations," the fire code official is authorized to institute appropriate action to prevent unlawful construction or to restrain, correct, or abate a violation; or to prevent illegal occupancy of a structure or premises; or to stop an illegal act, conduct of business, or occupancy of a structure on or about any premises.

(12) Chapter 2, "Definitions," is amended by the addition of the following additional definitions. For any definition that already exists, it is repealed and reenacted with the definition listed here:

....

Open Burning is the burning of any materials where visible products of combustion are emitted directly into ~~or substance, including rubbish, wastepaper, wood, vegetative material or other flammable material in the ambient air without passing through a chimney from a fireplace built in compliance with the City of Boulder Building Code~~ where emissions are released directly in the air without passing through a chimney or stack.

....

Sky Lantern means an unmanned device, whether tethered or untethered, made of paper or other thin material with a frame that contains a candle or other fuel source which creates an open flame or other heat source designed to heat the air inside the device, causing it to lift into the air in a manner similar to a hot-air balloon.

Tank Truck means any single rear axle, self-propelled motor vehicle, equipped with a cargo tank mounted thereon, and used for the transportation of flammable and combustible liquids, but this term excludes any combination of units, such as a semi-trailer. Said tank truck shall not exceed 35,000 GVW, and its total capacity shall not exceed 3,000 gallons.

Transport route means:

- (1) ~~Denver-Boulder Turnpike (U.S. 36) from the south city limits to Baseline Road.~~
- (2) ~~Foothills Parkway (Colorado 157) from U.S. 36 to the north city limits.~~
- (3) ~~28th Street from Baseline Road to the north city limits.~~
- (4) ~~Arapahoe Avenue from Folsom Street to the east city limits.~~
- (5) ~~Canyon Boulevard from 28th Street to the west city limits.~~
- (6) ~~Pearl Street/Pearl Parkway from Folsom Street to the east city limits.~~
- (7) ~~Longmont Diagonal Highway (Colorado 119) as it passes through the city limits.~~
- (8) ~~Valmont Road from Folsom Street to 55th Street.~~
- (9) ~~Airport Road and Airport Boulevard.~~
- (10) ~~Baseline Road from 27th Way to Foothills Parkway (Colorado 157).~~
- (11) ~~55th Street from Valmont Road to Arapahoe Avenue.~~
- (12) ~~30th Street from Arapahoe to Diagonal Highway (Colorado 119).~~
- (13) ~~Longmont Diagonal Highway (Colorado 119) from 28th Street to and connecting with Foothills Parkway (Colorado 157).~~
- (14) ~~South Foothills Parkway/Broadway (Colorado 93) from the south city limits to 27th Way and connecting to Baseline Road.~~

....

(13) Section 307, "Open burning, recreational fires, and portable outdoor fireplaces," is repealed and reenacted to read:

1 **307 Open burning and recreational fires.**

- 2 (1) No person shall kindle or maintain outside of a habitable building or outside of
3 an exterior fireplace built in accordance with the City of Boulder Building
4 Code any bonfire or burn or permit to be burned any trash, paper, rubbish,
5 wastepaper, wood, weeds, brush, plants, or other combustible or flammable
6 material anywhere within the city limits or anywhere on city property outside
7
- 8 (2) Mobile or portable type outdoor fire-places are prohibited to use within the city
9 limits or anywhere on city property outside of the city limits.

10 (**) Section 308.1.6.3 is repealed and reenacted to read:

11 **308.1.6.3 Sky lanterns.** No person shall use any sky lantern within the City of Boulder,
12 or anywhere on city-owned property outside of city limits, including Open Space and
13 Mountain Parks land.

14 (**) Exceptions 1, 2 and 32 to Section 311.2.2, "Fire protection," are repealed.

15 (15) A new Section 401.9, "Fire alarm fees," is added to read:

16 **401.9 Fire alarm fees.**

- 17 (a) After the fire department has responded to two nuisance alarms from the of fire
18 alarm system from any property or address in any calendar year, the city
19 manager may impose a charge for each additional response to an alarm which
20 originates from the property during the same calendar year, in accordance with
21 the schedule prescribed by Section 4-20-52, "Fire Code Permit and Inspection
22 Fees," B.R.C. 1981.
- 23 (b) The city manager may waive a charge imposed for a nuisance fire alarm
24 response if the property owner of record demonstrates that such alarm was
25 caused by a fire or the threat of a fire, or that such alarm was not under the
 property owner's control. It shall not be a defense that the alarm system is
 malfunctioning, unless the owner or manager is able to demonstrate that said
 alarm system is currently being serviced to remedy the problems being
 encountered.
- (c) If any fee is not paid within thirty days after demand therefor has been mailed
 to the record owner of the building, the city manager may certify the amount
 due to the County Treasurer pursuant to Section 2-2-12, "City Manager May
 Certify Taxes, Charges, and Assessments to County Treasurer for Collection,"
 B.R.C. 1981.

 (18) Section 510.4.1.1 is repealed and reenacted to read:

510.4.1.1 Minimum signal strength into the building. A minimum signal strength of -
 95 dBm shall be receivable within the building.

 (**) Section 514.4.1.2 is repealed and reenacted to read:

1 **510.4.1.2 Minimum signal strength out of the building.** A minimum signal strength
2 of -95 dBm shall be received by the agency's radio system with transmitted from within
3 the building.

4 (**)Section 603.4, "Portable unvented heaters," is repealed and reenacted to read:

5 **603.4 Portable unvented heaters.** Portable unvented fuel-fired heating equipment is
6 are prohibited inside any occupied structure.

7 (19)—Subsection 605.11.3.2.1, "Residential buildings with hip roof layouts," is repealed
8 and reenacted to read:

9 **605.11.3.2.1 Residential buildings with hip roof layouts.** Panels/modules installed on
10 residential buildings with hip roof layouts shall be located in a manner that provides a
11 3-foot-wide (914 mm) clear access pathway from the eave to the ridge on each roof
12 slope where panels/modules are located.

13 **Exceptions:**

- 14 1. — These requirements shall not apply to roofs with slopes of 2 units vertical in 12
15 units horizontal (2:12) or less.
- 16 2. — These requirements shall not apply to roofs where each panel/module array
17 area on the roof is 1,000 square feet (92.90 m²) or less in size, no continuous
18 section of panels/modules is larger than 150 feet in length or width, a clear
19 access pathway of not less than 12-inch width is provided along each side of
20 all horizontal ridges, and a clear access pathway of not less than 30-inch width
21 is provided from the eave to the ridge of one roof slope where panels/modules
22 are located.
- 23 3. — These requirements shall not apply to roofs where each panel/module array
24 area on the roof is 1,000 square feet (92.90 m²) or less in size, no continuous
25 section of panels/modules is larger than 150 feet in length or width, a clear
access pathway of not less than 12-inch width is provided along each side of
all horizontal ridges, and, where panels/modules are to be placed on both sides
of a hip, a clear access pathway of not less than 18-inch width is provided
along each side of such hip.
4. — These requirements shall not apply to roofs where the total combined area of
solar array does not exceed 33 percent as measured in plan view of the total
roof area of the structure.

(20)—Subsection 605.11.3.2.2, "Residential buildings with a single ridge," is repealed
and reenacted to read:

605.11.3.2.2 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) clear access pathways from the eave to the ridge on each roof
slope where panels/modules are located.

Exceptions:

1. — This requirement shall not apply to roofs with slopes of 2 units vertical in 12
units horizontal (2:12) or less.
2. — This requirement shall not apply to roofs where each panel/module array area
on the roof is 1,000 square feet (92.90 m²) or less in size, no continuous
section of panels/modules is larger than 150 feet in length or width, and a clear

access pathway of not less than 12-inch width is provided along each side of the horizontal ridge, provided that:

- a. The total combined area of solar array does not exceed 33 percent as measured in plan view of the total roof area of the structure; or
- b. A 30-inch wide clear access path is provided from the eave to the ridge of a roof slope where panels/modules are located.

(21) Subsection 605.11.3.2.3, "Residential buildings with roof hips and valleys," is repealed and reenacted to read:

605.11.3.2.3 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. In addition, a 12-inch wide clear access pathway shall be provided along each side of any horizontal ridge.

Exceptions:

1. This requirement shall not apply to roofs with slopes of 2 units vertical in 12 units horizontal (2:12) or less.
2. These requirements shall not apply to roofs where a 30-inch wide clear access pathway is provided from the eave to the ridge as well as 12-inch wide clear access pathways along each side of any horizontal ridge.

(22) Subsection 605.11.3.2.4, "Residential building smoke ventilation," is repealed and reenacted to read:

605.11.3.2.4 Pathways. All access pathways required under this Section 605.11.3.2 shall be provided in a structurally strong location on the building capable of supporting the live load of firefighters accessing the roof.

....

(26) The first sentence of Section 903.2 is repealed and reenacted to read:

Approved automatic sprinkler system in new buildings and structures shall be provided in the locations described in sections 903.2.1 through 903.2.16903.2.15.

....

(28) A new subsection is added to Section 903.2.1 to read:

903.2.1.6 Group B occupancies. An automatic sprinkler system shall be provided throughout all new Group B occupancies greater than 2,000 gross square feet (185.8 m²).

(29) Section 903.2.3, Group E, #1, is repealed and reenacted to read:

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

- (a) Throughout all Group E fire areas greater than 2,000 square feet (185.8 m²) in area.
- (b) The Group E fire area is located on a floor other than a level of exit discharge serving such occupancies.

(c) The Group E fire area has an occupant load of 300 or more.

~~(b) Exception is repealed.~~

~~(de)~~ All basements classified as, or a part of, a Group E occupancy shall be provided with an automatic sprinkler system regardless of the gross square footage.

(30) Section 903.2.4, Group F-1, is repealed and reenacted to read:

An automatic sprinkler system shall be provided throughout all new Group F occupancies greater than 2,000 square feet (185.8 m²).

(31) — Exceptions 3 and 4 to Section 903.2.6, Group I, are repealed.

(32) Section 903.2.7, Group M, is repealed and reenacted to read:

An automatic sprinkler system shall be provided throughout all Group M occupancies greater than 2,000 square feet (185.8 m²).

(33) Section 903.2.8 is amended by the addition of the following:

(a) Detached one- and two-family dwellings and multiple single-family dwellings (townhomes) not more than three stories above grade plane in height with a separate means of egress and their accessory structure shall comply with the fire sprinkler system requirements of the City of Boulder Residential Building Code.

(b) An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire areas.

~~Exception 1: Detached and two-unit attached dwelling units are not required to have an automatic fire sprinkler system if they are not used as residential board and care occupancies, and the distance, unobstructed by any structure above grade, landscaping, or topographical obstruction, from the curb face of the emergency vehicle access street on which the structure is addressed, to a face of the unit containing an entrance, is not greater than one hundred feet.~~

~~(b) — Exception 2: A detached dwelling unit is not required to have an automatic fire sprinkler system if it is not used as a residential board and care occupancy, and is located on a lot larger than 14,500 square feet, in which the driveway meets the requirements of a fire department accessible private drive, and extends without interruption from the nearest emergency vehicle access street on which the structure is addressed, to the side of the building which contains the main entrance.~~

~~(c) — If more than one principal building is constructed on a lot pursuant to the exceptions listed in Section 9-7-12, "Two Detached Dwelling Units on a Single Lot," B.R.C. 1981, then each building other than the building closest to an emergency vehicle access street on which the structure is addressed, shall be protected by an approved and supervised automatic sprinkler system in accordance with Section 903.3.~~

Exception: If a lot has frontage on two streets and each street is an emergency vehicle access street, then two buildings, each closest to their respective streets, shall not be required to be so protected by this subsection.

~~(d) Houses behind houses shall be protected throughout by an approved automatic sprinkler system in accordance with Section 903.3.~~

....

(**) A new Section 903.2.14, Group B Occupancies, is added to read:

Section 903.2.14 Group B Occupancies. An automatic sprinkler system shall be provided throughout all new Group B occupancies greater than 2,000 gross square feet (185.8m²).

(37) A new Section ~~903.2.15~~ 903.2.14 is added to read:

903.2.15903.2.14. Any occupancy, structure, or unit required to be protected by a sprinkler system by one provision of the fire code or the building code, and falling within an exception to a requirement of such protection to any other provision of the fire code or building code, shall be so protected.

(38) A new Section ~~903.2.16~~ 903.2.15 is added to read:

903.2.16903.2.15. If the floor area of an addition to any existing occupancy as described in sections 903.1 through ~~903.2.14~~ 903.2.13 above is greater than either fifty percent of the existing gross floor area or 2,000 square feet, and the total altered structure would be required to be protected by a sprinkler system by this section if it were new construction, then the entire addition shall be protected throughout by an approved and supervised automatic sprinkler system, installed in accordance with Section 903.3.1. Said sprinkler system shall be continuous throughout the addition up to a fire barrier built in accordance with the building code for that occupancy.

(39) Section 903.3.1.1.1 Exception 4 is repealed.

(40) Section 903.3.1.2.3, #4 – Subsection 4.2 and 4.5 are repealed.

(**) Section 903.3.5.2 ~~903.3.5.1.2~~ is repealed and reenacted to read:

903.3.5.2903.3.5.1.2 Residential combination services. Combination of domestic and fire service lines shall be in accordance with the City of Boulder Design and Construction Standard.

....

(43) A new Section 903.7, "Response time sprinkler requirement," is adopted to read:

903.7 Response time sprinkler requirement.

(a) It is the city's goal, as reflected in the Boulder Valley Comprehensive Plan's urban fire service criteria, that land not be annexed unless the response travel time for service is normally ~~four~~six minutes or less. Nonetheless, there may be occasions when annexation outside the existing ~~four~~six-minute travel time limit but within ~~six~~eight minutes or less is allowed, due to special circumstances, in the city's best interest. Before such land is annexed, consideration must be given to the need for and provision of additional fire stations and equipment to serve properly the area being annexed and to bring it within the ~~four~~six-minute travel time limit eventually. Protection by a sprinkler system as required by subsection (c) below is a temporary substitute, and is not intended to eliminate the requirement for additional fire stations and equipment.

(b) Land used or to be used for residential purposes will not normally be annexed if it is outside the ~~four~~six-minute travel time limit unless excepted from this

policy by subsection (d) below. All new dwelling units on land annexed outside the ~~four~~six-minute ~~travel time~~limit shall be protected by an automatic fire sprinkler system.

- (c) On land annexed after the effective date of this chapter and not excepted under subsection (d) below, all new nonresidential construction and any existing nonresidential structures shall be provided throughout with an approved and supervised fire sprinkler system installed in accordance with Section 903.3.1 adopted in Chapter 10-8, "Fire Code," B.R.C. 1981, if such land is outside of the ~~four~~six minute ~~travel~~ City of Boulder fire response-time from city fire stations housing at least one pumper which is rated at one thousand gallons per minute pumping capacity or greater, and which requires a crew of three or more for proper operation.

....

- (45) Section ~~907.6.6~~907.6.5 is repealed and reenacted to read:

907.6.6~~907.6.5~~ **Monitoring-** Fire alarm systems shall be supervised by an Underwriters Laboratory listed supervising station or a Proprietary Supervising Station Alarm System meeting all of the requirements in NFPA 72, *The National Fire Alarm and Signaling Code*.

Exception: Monitoring by a supervising station is not required for:

- (1) Single and multiple-station smoke alarms required by Section 907.2.10
(2) Automatic sprinklers systems in one and two family dwellings.

- (46) Section 1103.5, "Sprinkler systems," is repealed and reenacted to read:

1103.5 Sprinkler systems. The automatic sprinkler system requirements set forth in sections 903.1 and 903.2 of this code shall be complied with in existing buildings where the occupancy or use, as defined in Chapter 23 of the Existing Building Code of the City of Boulder, changes in a fire area exceeding 2,000 square feet.

Exception: Changes of occupancy or use which are a lower relative hazard per Table 1011.4 of the City of Boulder Existing Building Code and the new occupancy or use is not required to be provided with an automatic sprinkler system by other provisions of the City of Boulder Building Code or the City of Boulder Existing Building Code.

- (**) Section 1204.2.1.1, Pathways to ridge, is repealed and reenacted to read:

1204.2.1.1, Pathways to ridge. No fewer than two 30-inch-wide (914 mm) pathways on separate roof planes, from the lowest roof edge to ridge, shall be provided on all buildings. At least one pathway shall be provided on the street or driveway side of the roof. For each roof plane with a photovoltaic array, at least one 30-inch-wide (914 mm) pathway from lowest roof edge to ridge shall be provided on the same roof plane as the photovoltaic array, on an adjacent roof plane or straddling the same and adjacent roof plane.

1 All access pathways required under this section shall be provided in a structurally
2 strong location on the building capable of supporting the live load of fire fighters
3 accessing the roof.

4 (**) Section 1204.2.1.2, Setbacks at ridge, is repealed and reenacted to read:

5 **1204.2.1.2, Setbacks at ridge.** Not less than a 12-inch-wide setback is provided on
6 each side of the horizontal ridge.

7 (**) Section 1204.2.1.3, Alternative setbacks at ridge, is repealed.

8 (47) Section 5601.2.4.2, "Fireworks," is amended by the addition of the following:

9 The city manager shall require a certificate of insurance to protect persons and property
10 from death or injury as a result of the fireworks display, in an amount not less than
11 \$1,000,000~~150,000~~ general liability per occurrence~~person injured~~ and
12 \$2,000,000~~600,000~~ aggregate limit~~per incident~~. The insurance shall cover any liability
13 of the city or any employee or agent thereof arising out of or connected with the permit
14 and the fireworks display permitted thereunder. Before any permit for a fireworks
15 display is issued, the applicant shall comply with the provisions of this section.

16 (48) ~~Section 5701.4, "Permits," is amended by the addition of the following:~~

17 (1) ~~A regular permit allows a permittee on a transport route to take delivery of flammable~~
18 ~~and combustible liquids from any delivery vehicle or from a tank truck where the~~
19 ~~premises are located on a transport route. Upon payment of the fee provided in Section 4-~~
20 ~~20-52, "Fire Code Permit and Inspection Fees," B.R.C. 1981, the city manager shall issue~~
21 ~~to an applicant therefor a permit to receive deliveries of flammable and combustible~~
22 ~~liquids at a particular location or outlet if the manager finds that:~~

23 (a) ~~The outlet or location contains sufficient room to accommodate the delivery~~
24 ~~vehicle, so that the delivery vehicle is capable of being parked entirely within~~
25 ~~the property boundary lines of the outlet or location and in such a manner that~~
no part of the vehicle extends into any street, sidewalk, or alley while the
vehicle is off-loading and no backing of the vehicle either into or out of station
property is necessary;

(b) ~~The entrance and exit access ways for the delivery vehicle are so arranged that~~
no obstruction of traffic will result from the vehicle entering or leaving the
outlet or location; and

(c) ~~The storage tanks for flammable and combustible liquids are located~~
underground and constructed in accordance with the applicable provisions of
this code, unless specifically allowed to be installed above ground by other
sections of this code.

(2) ~~A special permit allows a permittee to take delivery of flammable and combustible~~
liquids on premises outside of transport routes from specified delivery vehicles other than
a tank truck. The owner or person in control of any outlet or location holding a regular
permit may, upon payment of the fee provided in Section 4-20-52, "Fire Code Permit and
Inspection Fees," B.R.C. 1981, apply to the city manager for a special permit allowing
delivery with a vehicle other than a tank truck as defined in Section 221. The manager
shall schedule with the applicant a simulated demonstration with an empty vehicle of the
size and design that the applicant will use under the permit. The applicant shall furnish

1 the vehicle and driver at its cost. The simulated test shall be observed by the manager
2 who shall issue the special permit if the manager finds that:

- 3 (a) — The outlet or location contains sufficient room to accommodate the delivery
4 vehicle, so that the delivery vehicle is capable of being parked entirely within
5 the property boundary lines of the outlet or location in such a manner that no
6 part of the vehicle shall extend into any street, sidewalk, or alley while the
7 vehicle is off loading, and no backing of the vehicle either into or out of the
8 station property is necessary;
- 9 (b) — The entrance and exit access ways for the delivery vehicles are so arranged
10 that no obstruction of traffic will result from the vehicle entering or leaving the
11 outlet or location;
- 12 (c) — The roads and streets are accessible to fire fighting equipment and vehicles;
- 13 (d) — The topography or configuration of the roads and streets does not involve
14 potential difficulties in containing, fighting, or suppressing a fire or spill and
15 does not impair the ability of a transport vehicle to maneuver safely; and
- 16 (e) — The traffic congestion and flow of vehicles using the roads and streets will not
17 create potential hazards to transport vehicles.

18 Upon issuance, the permit will designate a specific route to be followed from the
19 nearest transport route to the permit location and to return to the transport route. The
20 permit will specify a vehicle capacity. Special permits are valid only between 3 a.m.
21 and 6 a.m. But, for the delivery of gasoline or diesel fuel only, if the permit location is
22 in an industrial zone and is connected to a transport route by a former transport route
23 established by ordinance 4636 (1982), and the applicant demonstrates that there were no
24 incidents involving the discharge of gasoline or diesel fuel from delivery vehicles using
25 the relevant portion of such former route, then the manager may issue the special permit
for such other hours as the applicant is able to demonstrate present no more hazard than
delivery during the hours of 3 a.m. through 6 a.m.

(3) Revocation or Suspension of Permits.

- 16 (a) — Each of the following is a ground for revocation of a special permit:
 - 17 1. — Failure of a transport vehicle to park entirely on the site while unloading;
 - 18 2. — Obstructing of sidewalks while unloading;
 - 19 3. — Backing the vehicle onto or off of the site;
 - 20 4. — Obstruction of traffic while entering or leaving;
 - 21 5. — Failure of a transport driver to follow the prescribed route to or from the
22 permit location;
 - 23 6. — Failure to maintain a copy of the special permit on the premises; or
 - 24 7. — Failure of a transport driver to be present while off loading.
- 25 (b) — Each of the following is a ground for suspension of a regular permit for up to
fourteen days:
 - 1. — Failure of a transport vehicle to park entirely on the site while unloading;
 - 2. — Obstructing of sidewalks while unloading;
 - 3. — Backing the vehicle onto or off of the site;
 - 4. — Obstruction of traffic while entering or leaving;
 - 5. — Failure of a transport driver to follow the prescribed route to or from the
permit location; or
 - 6. — Failure of a transport driver to be present while off loading.

1 (c) — When matters are brought to the attention of the city manager, which if
2 substantiated would be grounds for revocation of a special permit or
3 suspension of a regular permit, the manager shall issue a written notice thereof
4 to the permittee containing a concise written statement of the violation
5 constituting grounds for revocation or suspension and indicating that the
6 revocation or suspension shall take effect fourteen days after the issuance of
7 said notice unless the permittee appeals in accordance with the terms of
8 Section 108.

9 (d) — All special permit revocations shall be for a period of six months, after which
10 time the permittee may reapply for a special permit. During the period of
11 revocation, the outlet may continue to operate with and according to the terms
12 of a regular permit.

13 (4) If, due to changed conditions, including, without limitation, changes in the transport
14 routes, the manager has probable cause to believe that an existing regular or special
15 permit no longer meets the criteria for issuance, the manager may require a new
16 simulated demonstration. For purposes of notice and appeal, such proceedings shall be
17 deemed a new application, but no additional fee shall be charged.

18 (49) — A new Section 5701.6, "Prohibited acts," is adopted to read:

19 **5701.6 Prohibited acts.**

20 (a) — No owner and no person in control of any outlet or location shall accept
21 deliveries of flammable or combustible liquids, unless such person has applied
22 for and has been issued a permit therefor by the city manager.

23 (b) — No owner and no person in control of any outlet or location for which a permit
24 to accept deliveries of flammable or combustible liquids has been issued shall
25 accept deliveries of such liquids unless delivery is in compliance with all the
provisions of this code and any conditions on the permit.

(c) — No person shall spill more than thirty-two fluid ounces of flammable or
combustible liquid upon the ground.

(d) — No person shall fail to notify the fire department of any spill of flammable or
combustible liquid of more than thirty-two fluid ounces at the earliest
practicable moment after said spill has occurred.

(e) — Except to replace existing tanks, no person shall install any tanks used for the
storage of any type of flammable or combustible liquid, or other hazardous
material or waste in the floodplain as defined in Chapter 9-16, "Definitions,"
B.R.C. 1981. This prohibition is not retroactive, but no person shall use or
maintain any tank installed in violation of this prohibition.

(f) — No person shall weld or cut by torch on the premises of a service station or
allow or cause crankcase drainings to be spilled or poured onto the ground. No
person shall dispose of hazardous materials by dumping or pouring on the
ground or into a storm drain or sanitary sewer or any connection thereto.

(50) — Section 5704.2, "Tank storage," is amended by the addition of the following:

(a) Except for fuel carried on tank trucks, above-ground storage of all Class I, II, and III
flammable and combustible liquids in aggregate amounts of more than 500 gallons of
such liquids on a single lot is allowed only in those areas of the city zoned "industrial."
All installations shall comply in all respects with chapter 57. Any tank intended for the

1 bulk storage of any Class I, II, or III flammable or combustible liquid may be stored
2 above ground only in those areas of the city zoned industrial.

3 (b) Liquefied natural gas (LNG) or liquefied petroleum gas (LP Gas) may be stored
4 aboveground in areas of the city zoned "industrial" and dispensed at such sites by a
5 service station if the city manager finds that such installation meets all the requirements
6 of applicable fire codes before any dispensing of such fuel and proper and necessary on-
7 site fire control devices are provided.

8 (c) All underground tanks used for dispensing or bulk storage of any flammable or
9 combustible liquid shall comply with the requirements of chapter 57, Flammable and
10 Combustible Liquids, any other pertinent city codes, including, without limitation, those
11 concerning fire and flood, the Colorado State Oil Division, and the manufacturer's
12 specifications for installation. Plans for installation shall be approved by the Colorado
13 State Oil Division and the city flood control office before the city may issue permits for
14 construction, installation, and use of the tanks. No person shall install a used tank.

15 (d) No person shall install a tank or tanks for the dispensing or bulk storage of any
16 flammable or combustible liquid, including temporary installations on construction sites,
17 until such person has first submitted plans for the installation to the city manager and has
18 received approval of such plans and of the installation.

19 (51) A new Section 5706.2.8.2, "Safety devices required for outlets or locations
20 accepting deliveries of flammable or combustible liquids," is adopted to read:

21 **5706.2.8.2 Safety devices required for outlets or locations accepting deliveries of**
22 **flammable or combustible liquids.** No owner and no person in control of any outlet or
23 location shall accept deliveries of flammable and combustible liquids, and no person
24 shall make deliveries of such liquids to any outlet or location, unless the following
25 conditions are met during such delivery:

(a) The hose connection employed in making a delivery of flammable or
combustible liquids contains the safety device known as a "glass elbow" to
allow inspection of the contents of the delivery hose; and

(b) Any hose used in making deliveries of flammable or combustible liquids
contains the apparatus commonly known as a tight-fill connection device to
secure the off loading device of the delivery vehicle to the intake structure of
the storage tank.

(c) Exceptions to (a) and (b) above may be granted by the city manager for
industrial installations if conditions warrant.

(52) A new Section 5706.2.8.3, "Full compartment dumps required," is adopted to
read:

5706.2.8.3 Full compartment dumps required. Any person delivering flammable and
combustible liquids in a vehicle that contains compartments larger than six hundred
gallons shall empty each such compartment at a single stop, if any delivery of liquids is
made at any outlet or location from any such compartment.

(53) In Chapter 80, "Referenced Standards," is amended by the addition of the
following the NFPA standard reference numbers for 13, 13D, 13R, and 72 are repealed
and reenacted to read:

1 8001 NFPA Standards. In every case where this code references a standard published by
2 the National Fire Protection Association (NFPA), the most current edition of the
3 referenced standard is hereby adopted. The most current edition of the referenced
4 NFPA standard shall become effective on January 1st following the publication and
5 release of the standard.

6 13-13
7 13D-13
8 13R-13
9 72-13

10-8-3. - Violations.

7 Repealed.

8 Section 11. Chapter 10-8.5, "Wildland Code," B.R.C. 1981, is amended as follows:

10-8.5-1. - Legislative Intent.

10 The purpose of this chapter is to protect public health and safety by regulating the use,
11 condition, construction, alteration, repair, and maintenance of buildings, structures, and premises
12 within the wildland-urban interface areas in the city in order to prevent the spread of fire and risk
13 of harm to persons and property from the intrusion of fire from wildland fire exposures and fire
14 exposures from adjacent structures, as well as to prevent structure fires from spreading to
15 wildland fuels. The city council hereby adopts the 2018~~2012~~ edition of the *International*
Wildland-Urban Interface Code with certain amendments, additions, and deletions thereto found
16 to be in the best interests of the city.

10-8.5-2. - Adoption of the International Wildland-Urban Interface Code With Modifications.

- 16 (a) The 2018~~2012~~ edition of the *International Wildland-Urban Interface Code* of the
17 International Code Council is adopted by reference as the City of Boulder Wildland Code
18 and has the same force and effect as though fully set forth in this chapter, except as
specifically amended by the provisions of this chapter.

....

- 19 (d) Section 103.1, "Creation of an enforcement agency," is repealed and reenacted to read:

20 **103.1 Division of Building Safety.** "Division of Building Safety" means the administrative
21 unit established by the city manager or the manager's delegates, and the personnel assigned
22 to the unit by the manager. The Division of Building Safety administers the City of Boulder
Wildland Code assisted by a Community Risk Reduction~~Division of Fire Safety~~, established
within the fire department, under the direction of the manager.

....

- 24 (h) Section 108.1, "General," is repealed and reenacted to read:

25 **108.1 General.** The requirements of Section 107.1~~1406.1~~, "General~~Submittal documents~~," of
the City of Boulder Building Code apply.

(i) Section ~~110.4.6~~~~109.4.6~~, "Prosecution of violation," is repealed and reenacted to read:

110.4.6~~109.4.6~~ Violations.

....

(j) Section ~~110.4.7~~~~109.4.7~~, "Violation penalties," is repealed.

....

(m) Section 403.2.1, "Dimensions," is repealed and reenacted to read:

403.2.1 Dimensions. Driveways shall be provided as defined in Section 503.2.1, "Dimensions," of the City of Boulder Fire Code, as locally amended in Paragraph ~~40-8-1(15)~~~~10-8-2(b)(16)~~, B.R.C. 1981, for an "accessible private drive" and with a minimum unobstructed height of 15 feet (4572 mm).

....

(q) 503.2 Ignition-resistant building material. Add the following, as option 5:

5. Deck surface. Approved wood thermoplastic composite lumber with an ASTM E84 flame-spread index no greater than 200, or any approved Class A roof assembly.

(**) Section 505.2, "Roof covering," is repealed and reenacted to read:

505.2 Roof covering. Roofs shall be installed in accordance with the requirements of the City of Boulder Building Code and the City of Boulder Residential Building Code, as applicable.

....

Section 12. Chapter 10-9, "Mechanical Code," B.R.C. 1981, is amended as follows:

10-9-1. - Legislative Intent.

The purpose of this chapter is to protect the public health and safety by regulating the installation, alteration, and repair of heating, ventilating, cooling, and refrigeration devices in structures in the city. The city council hereby adopts the ~~2018~~~~2012~~ edition of the *International Mechanical Code* with certain amendments and deletions thereto found to be in the best interests of the residents of the city.

10-9-2. - Adoption of the International Mechanical Code With Modifications.

(a) The ~~2018~~~~2012~~ edition of the *International Mechanical Code*, including Appendix A thereto, of the International Code Council, is hereby adopted by reference as the Mechanical Code of the City of Boulder or mechanical code and has the same force and effect as though fully set forth in this chapter, except as specifically amended by the provisions of this chapter.

....

Section 13. Chapter 10-9.5, "Fuel Gas Code," B.R.C. 1981, is amended as follows:

1 **10-9.5-1. - Legislative Intent.**

2 The purpose of this chapter is to protect the public health and safety by regulating fuel
3 gas systems and gas-fired appliances in the city. The city council hereby adopts the 20182012
4 edition of the *International Fuel Gas Code* as a new Chapter 10-9.5 with certain amendments
thereto found to be in the best interest of the city.

4 **10-9.5-2. - Adoption of the International Fuel Gas Code With Modifications.**

5 (a) The 20182012 edition of the *International Fuel Gas Code* of the International Code
6 Council is hereby adopted by reference as the City of Boulder Fuel Gas Code or fuel gas
code and has the same force and effect as though fully set forth in this chapter, except as
specifically amended by the provisions of this chapter.

7
8 (e) ~~Section 404.9.1 is repealed.~~

9
Section 14. Chapter 10-10, "Plumbing Code," B.R.C. 1981, is amended as follows:

10 **10-10-1. - Legislative Intent.**

11 The purpose of this chapter is to protect the public health and safety by regulating the
12 installation, alteration, and repair of plumbing devices in structures in the city. The city council
hereby adopts the 20182012 edition of the *International Plumbing Code* with certain
amendments and deletions thereto found to be in the best interests of the residents of the city.

13 **10-10-2. - Adoption of the International Plumbing Code With Modifications.**

14 (a) The 20182012 edition of the *International Plumbing Code*, published by the
15 International Code Council, including Appendix E, "Sizing of Water Piping System," is
hereby adopted by reference as the City of Boulder Plumbing Code or plumbing code,
16 and has the same force and effect as though fully set forth in this chapter, except as
specifically amended by the provisions of this chapter.

17 (b) Except for Sections 101, 102, and 107, Chapter 1 is repealed. This code shall be
administered in accordance with Chapter 1, "Administration," of the International
18 Building Code as adopted, with amendments, by Section 10-5-2, "Adoption of
International Building Code With Modifications," B.R.C. 1981.

19 (c) Section 101.1, "Title," is repealed and reenacted to read:

20 **101.1 Title.** These regulations shall be known as the Plumbing Code for the City of Boulder
21 or plumbing code and will be referenced herein as "this code."

22 (d) The Exception to Section 301.3, "Connections to drainage system," is deleted in its
entirety.

23 (e) Section 312.5, "Water supply system test," is amended by deleting the words "for piping
24 systems other than plastic" and by modifying the test pressure required from 50 psi (344
kPa) to 100 psi (688 kPa).

25 (f) Section 403.2 Separate Facilities is amended to add the following Exception 5.

5. Separate facilities are not required when multiple fixture all gender facilities are provided. Multiple fixture all gender facilities are not required; they are an alternative to be determined by the property owner or the owners' agent.

(g) Section 403.4 "Signage" is repealed and reenacted to read:

403.4 Signage. Required public facilities shall be provided with signs that designate which genders the facility accommodates as required by section 2902.2. Signs shall be readily visible and located near the entrance to each toilet facility. Signs for accessible toilet facilities shall comply with Section 1111.

Exception: Toilet facilities with only one water closet shall not be identified for exclusive use by any gender and shall be deemed to meet the requirements of this section. Signage shall be provided in accordance with the requirements of the City of Boulder Building Code.

(h) Section 403.4.1 Directional signage. Directional signage indicating the route to the required public toilet facilities shall be posted in a lobby, corridor, aisle or similar space, such that the sign can be readily seen from the main entrance to the building or tenant space.

(i) Section 403.4.2 All gender signage. Single-user toilet facilities provided in accordance with Section 403.1.2, and family or assisted-use toilet facilities provided in accordance with Section 403.2.1, shall be provided with signs which clearly indicate the facilities are available for use by all genders.

(j) Section 403.4.2.1 Existing single-user toilet facilities. After December 31, 2020, all existing single-user toilet facilities and family or assisted-use toilet facilities, shall be provided with signage in accordance with Section 403.4.2.

Section 504.7.1 "Piping for safety pan drains shall be of those materials listed in Table 605.4," is repealed.

(kg) TABLE 404.4 Maximum Flow Rates and Consumption for Plumbing Fixtures and Fixture Fittings," is repealed and reenacted to read:

TABLE 404.4

MAXIMUM FLOW RATES AND CONSUMPTION FOR PLUMBING FIXTURES AND
FIXTURE FITTINGS

Table 604, "Water Distribution System Design Criteria Required Capacity at Fixture Supply Pipe Outlets," is repealed and reenacted to read:

TABLE 604.4

WATER DISTRIBUTION SYSTEM DESIGN CRITERIA REQUIRED CAPACITY AT
FIXTURE SUPPLY PIPE OUTLETS

PLUMBING FIXTURE OR FIXTURE FITTING	MAXIMUM FLOW RATE OR QUANTITY
Lavatory, private	1.5 gpm at 60 psi

1	Lavatory, public (metering)	0.25 gallon per metering cycle
2	Lavatory, public (no metering)	0.5 gpm at 60 psi
3	Shower head	2.0 gpm at 80 psi
4	Sink Faucet	1.5 gpm at 60 psi
5	Urinal	1.0 gallon per flushing cycle
6	Water Closet	1.28 gallons per flushing cycle

7 For SI: 1 gallon = 3.785L, 1 gallon per minute = 3.785 L/m,
8 1 pound per square inch = 6.895 kPa.

9 a. A handheld shower spray is a shower head.

10 b. Consumption tolerances shall be determined from referenced standards.

11 (h) ~~Section 610, "Disinfection of potable water system," is repealed.~~

12 (i) Section 605.3 is amended by adding a new paragraph to read:

Water service line pipe between the water meter and building shall be Type K copper if it is in the public right of way, a public utility easement, or on other public property.

13 ~~(**) Section 610, "Disinfection of potable water system," is repealed.~~

14

15 (q) Chapter 13, ~~"NONPOTABLE WATER"~~Gray Water Recycling SYSTEMS," is deleted in its entirety.

16 (r) Chapter 14, "SUBSURFACE LANDSCAPE IRRIGATION SYSTEMS," is deleted in its entirety.

17 ~~(**) Table E103.3(2), "Load Values Assigned to Fixtures," is amended by the addition of a new sentence to read:~~

18 For the purpose of determining the largest instantaneous demand required in order to size a water meter, ~~or for determining the amount of the plant investment fee,~~ this table is repealed and replaced by Chapter 11-1-35, "Meter Size Requirements," ~~the Fixture Unit/GPM Demand Chart and PIF Computation Sheet found at Appendix A to Chapter 11-1, "Water Utility," B.R.C. 1981.~~

19 (s) Table E103.3(3), "Table for Estimating Demand," is amended by the addition of a new sentence to read:

20 For the purpose of determining the largest instantaneous demand required in order to size a water meter, ~~or for determining the amount of the plant investment fee,~~ this table is repealed and replaced by Chapter 11-1-35, "Meter Size Requirements," ~~the Fixture Unit/GPM Demand Equations and PIF Computation Sheets found at Appendix A to Chapter 11-1, "Water Utility," B.R.C. 1981.~~

1 Section 15. Chapter 4-20, is amended to add a new Section 4-20-72 “Construction and
2 Demolition Deposit Administrative Fee,” B.R.C. 1981, to read as follows:

3 **4-20-72. - Construction and Demolition Deposit Administrative Fee.**

4 An applicant for a building or demolition permit which requires a deposit under section 3601.2.3
5 of the City of Boulder Building code or section R328.2.3 of the City of Boulder Residential Code
6 shall pay an administrative fee of \$100.

7 Section 16. The city council deems it appropriate to repeal the *2017 City of Boulder*
8 *Energy Conservation Code* and adopt by reference the *2020 City of Boulder Energy*
9 *Conservation Code*. The city council orders that at least one copy of the *2020 City of Boulder*
10 *Energy Conservation Code* being considered for adoption by reference in this ordinance be on
11 file with the city clerk and open for public inspection during the business hours of the city. Such
12 copy shall be certified to be true by the mayor and the clerk.

13 Section 17. The city council orders and directs the city manager to make any additional
14 citation, renumbering, and reference changes not included in this ordinance that are necessary to
15 properly implement this ordinance and the *2020 City of Boulder Energy Conservation Code*.
16 The city council authorizes the city manager to change the formatting and layout of the *2020 City*
17 *of Boulder Energy Conservation Code*.

18 Section 18. The city council intends that the sections, paragraphs, clauses, and phrases of
19 this ordinance and the codes adopted herein by references be severable. If any phrase, clause,
20 sentence, paragraph or section of this code or the codes adopted herein by reference is declared
21 unconstitutional or invalid by the valid judgement or decree of any court of competent
22 jurisdiction, such unconstitutionality or invalidity does not affect any of the remaining phrases,
23 clauses, sentences, paragraphs and sections of this code or the codes adopted herein, unless it
24 appears to the court that the valid provisions of the section or ordinance are so essentially and
25 inseparably connected with, and so dependent upon, the void provision that it cannot be

1 presumed the council would have enacted the valid provisions without the void one; or unless the
2 court determines that the valid provisions, standing alone, are incomplete and are incapable of
3 being executed in accordance with the legislative intent. If provision of an exception invalidates
4 a prohibition, but the prohibition without the exception would be valid, then it is council's intent
5 in such cases that the exception be severed and the prohibition upheld.

6 Section 19. This ordinance shall take effect on July 1, 2020. It shall be applied to
7 building permit applications submitted on or after the effective date. Building permits applied for
8 before the effective date shall be considered under the program in effect at the time of
9 application.

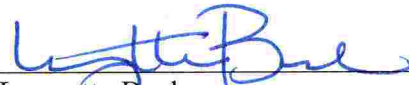
10 Section 20. This ordinance is necessary to protect the public health, safety, and welfare
11 of the residents of the city, and covers matters of local concern.

12 Section 21. The city council deems it appropriate that this ordinance be published by title
13 only and orders that copies of this ordinance be made available in the office of the city clerk for
14 public inspection and acquisition.

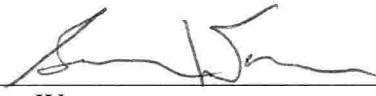
15
16 INTRODUCED, READ ON FIRST READING, AND ORDERED PUBLISHED BY
17 TITLE ONLY this 19th day of November 2019.

18
19
20 
21 Sam Weaver,
Mayor

22 Attest:

23 
24 Lynnette Beck,
City Clerk

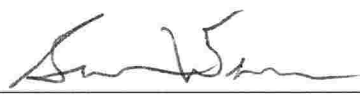
1 READ ON SECOND READING, AMENDED AND ORDERED PUBLISHED BY
2 TITLE ONLY this 21st day of January 2020.

3
4 
5 _____
6 Sam Weaver,
Mayor

7 Attest:

8 
9 _____
Lynnette Beck,
City Clerk

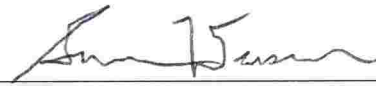
10 READ ON THIRD READING, AMENDED AND ORDERED PUBLISHED BY TITLE
11 ONLY this 18th day of February 2020.

12
13 
14 _____
15 Sam Weaver,
Mayor

16 Attest:

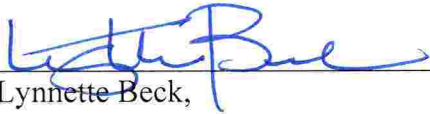
17 
18 _____
19 Lynnette Beck,
20 City Clerk
21
22
23
24
25

1 READ ON FOURTH READING, PASSED AND ADOPTED this 3rd day of March 2020.

2 

3 Sam Weaver,
4 Mayor

5 Attest:

6 

7 Lynnette Beck,
8 City Clerk