Page 1 of 17 19



CONSENT CALENDAR May 7, 2024

To: Honorable Mayor and Members of the City Council

From: Dee Williams-Ridley, City Manager

Submitted by: David Sprague, Fire Chief, Berkeley Fire Department

Subject: Modification and Adoption of Berkeley Fire Code Local

Amendments and Incorporation of California Intervening Code Adoption Cycle Amendments Based on the 2022 California Fire

Code

# RECOMMENDATION

- Adopt the first reading of an Ordinance (Attachment 1) which proposes to amend certain portions of Section 19.48.020 of the Berkeley Municipal Code ("Amendments to the California Fire Code");
- 2. Adopt a Resolution (Attachment 2) setting forth findings as to local conditions applicable to the revised portions of Section 19.48.020 that require more stringent building standards than those provided by the 2022 California Fire Code ("CFC") with intervening code adoption cycle amendments, and amending Resolution number 70.611–N.S.:
- 3. In compliance with state law on adopting such codes by reference, hold a public hearing following the first reading, and before the second reading, and schedule the second reading and public hearing for June 4, 2024.

# **SUMMARY**

On December 6, 2022 the Berkeley City Council adopted the current edition of the Berkeley Fire Code (BFC), which was based on the State of California adoption of the 2022 California Fire Code. The current Berkeley Fire Code contains appropriate local amendments and additions as adopted by Council. This code went into effect on January 1, 2023.

The State of California has issued new amendments and additions ("amendments") to the 2022 California Fire Code. These new amendments will take effect on July 1, 2024. If the City of Berkeley wishes to continue enforcement of our existing local fire code amendments without interruption, any local amendments which have been affected by the new state amendments must be revised, and the revised local amendments adopted by City Council on or before July 1, 2024.

As part of the recurring, triennial cycle of building standards adoption, the California Building Standards Commission and allied State code development agencies (including the Office of the State Fire Marshal) develop and issue supplemental building standards. The process of developing supplemental building standards is formally referred to as the Intervening Code Adoption Cycle. These standards are normally issued and become effective approximately eighteen months into a three-year triennial code cycle, and are often referred to as "mid-cycle amendments".

The mid-cycle amendments will override locally adopted building and fire code amendments if the language or section numbering of the state revisions conflicts with local amendments to the codes. Local jurisdictions may adopt local amendments to the California Fire Code (CFC), and to any supplemental building standards which may subsequently amend the CFC, including the mid-cycle amendments.

In the current situation, mid-cycle amendments to the fire code that have been adopted by the state have modified some language within fire code sections that are the subject of local Berkeley amendments. Additionally, the state's changes have renumbered some code sections. This change in language and renumbering will overwrite important provisions of local Berkeley fire code amendments unless the local amendments are revised to avoid conflict with the state code. As previously stated, If Berkeley wishes to continue to apply our local fire code amendments without interruption, the Berkeley City Council must act to amend the Berkeley Fire Code adoption to conform with the new California Fire Code language and numbering before July 1, 2024.

These local Berkeley fire code amendments address local conditions specific to our community that effect our local fire and life safety. The City has adopted multiple fire code amendments in the past that are designed to address these concerns. Staff recommends that the City Council revise and adopt the effected local amendments to the California Fire Code that have been modified in the state's Intervening Code Adoption Cycle as set forth in the attached documents. This action will maintain the current local level of fire and life safety as intended by Council's original adoption action.

#### FISCAL IMPACTS

The fiscal impact to the City will be negligible. The publisher of the California Fire Code prints and distributes mid-cycle amendments to the state codes at no charge to existing code subscribers. No new fire code books, inspection guides, inspection forms or training is required.

Updating the local fire code amendments to continue them in-force simply maintains the current status quo. It does not create cost increases for homeowners, builders or developers beyond those costs already mandated by current Berkeley codes and statutes.

#### **CURRENT STATUS AND EFFECTS**

As part of a regular three-year cycle, the Office of the California State Fire Marshal and the California Building Standards Commission promulgated the 2022 California Fire Code. The California Fire Code (Title 24, Part 9 of the California Code of Regulations),

and Berkeley's local adoption of the fire code in the form of the Berkeley Fire Code (B.M.C. section 19.48) took effect on January 1, 2023. The Berkeley Fire Code provides minimum standards for fire and life safety.

Berkeley has long elected to establish more restrictive building standards as reasonably necessary because of local climatic, geological or topographical conditions in accordance with Calif. Health & Safety Code Sections 18941, 17958, 17958.5, 17958.7 and other statutes. Findings of the local condition(s) and the adopted local building standard(s) must be filed with the California Building Standards Commission.

California's mid-cycle amendments effect local fire code adoptions to varying degrees. The current body of mid-cycle amendments effects the language and numbering of code sections throughout the entire body of the California Fire Code, and effects over 190 pages of the current code in total. In the present case, the majority of these California mid-cycle amendments do not affect our local fire code adoption. The impact to Berkeley's local amendments requires relatively minor changes in language to, or renumbering of, local fire code amendments in order to maintain consistency with the language, structure and organization of the California Fire Code as amended by the Intervening Cycle Code Adoption process. In the current situation, the state mid-cycle amendments that conflict with local Berkeley amendments occur within Berkeley's wildfire safety amendments (Chapter 49 of the Berkeley Fire Code).

Staff's recommendations on modifications to local amendments required to harmonize the Berkeley Fire Code with the California Fire Code as amended by the California Intervening Code Adoption Cycle, include:

1) Amend Paragraph DDD of Section 19.48.020 of the Berkeley Municipal Code ("Amendments to the California Fire Code"). Paragraph DDD currently implements local amendments to Section 4902.1 ("General"), of the California Fire Code (CFC). Our current local amendments to CFC Section 4902.1 add important local definitions related to the regulation, control and abatement of wildfire hazards within Berkeley.

This paragraph and the amended CFC section define our Local Agency Very High Fire Hazard Severity Zone and Wildland Urban Interface area, as they are currently recognized in local law, and as that recognition effects current and future requirements as established in state law. These definitions relate the local definitions of "Fire Zone 1", "Fire Zone 2" and "Fire Zone 3" to the Local Agency Very-High Fire Hazard Severity Zone and Wildland-Urban Interface area. The existing locally amended BFC Section also modifies the definition of "Fire Protection Plan" so that it can apply to both proposed and existing properties, projects and developments.

While the bulk of Paragraph DDD of Section 19.48.020 of the B.M.C. is not directly impacted by the mid-cycle amendments, as of July 1, 2024 the CFC amendments will slightly modify the code's usage of the term "Wildland-Urban Interface". The amendments being proposed to Paragraph DDD will implement those same changes in language while preserving our local amendments, and will ensure continued compatibility between the BFC adoption and the CFC.

2) Amend Paragraphs UUU through PPPP of Section 19.48.020 of the Berkeley Municipal Code ("Amendments to the California Fire Code"). The twenty-two Paragraphs embodied by UUU through PPPP currently occupy Section 4911 of the Berkeley Fire Code and create an additional fire code section and subsections within our local adoption that do not exist within the current CFC. These additional sections define and regulate activity and hazards within Berkeley's Wildland-Urban Interface area, and provide important tools for regulating and mitigating related hazards, such as providing appropriate ignition controls in hazardous wildfire areas.

The controls established by these Paragraphs of B.M.C. 19.48.020 regulate such mundane but important topics as prohibiting the placing, depositing or disposing of ashes or coals in wildland areas. The state's mid-cycle amendments have now adopted Section 4911 for purposes unrelated to these local controls, so these controls must be moved to a newly created code section, which is proposed as Section 4912. In addition to the conflict caused by renumbering, the local hazard controls will also be affected by the same changes in Wildland-Urban Interface terminology that was previously discussed related to Paragraph DDD above. The proposed changes in the language used in these Berkley amendments will also ensure compatibility between the California and State fire codes, as well as consistency within our own code adoption.

#### **BACKGROUND**

The City of Berkeley has unique climatic, geological, and topographical conditions, which require local amendments to mitigate potential hazards, and to reduce loss of life caused by fires or natural disasters. To address local fire and life safety impacts, the City of Berkeley has adopted local amendments to address local conditions which make CFC requirements inadequate. Without the adoption of local amendments, needed fire and life safety enhancements cannot be enforced.

In the current case where state amendments to the CFC effect Berkeley's local fire code amendments, an ordinance modifying the existing local amendments and a findings-of-fact resolution are proposed in order to ensure successful adoption of local amendment modifications and the maintenance of our local standards. These local amendments, or other building or fire code requirements triggered by these amendments, may qualify as building standards in accordance with state law. Also in the current case, no new permits, fees, or fee adjustments are proposed at this time, so no changes to the current fee schedule are required or proposed.

#### ENVIRONMENTAL SUSTAINABILITY AND CLIMATE IMPACTS

Unwanted fires have a significant, detrimental effect on the environment, climate, and the sustainability of our society. Air emissions from fires include soot/carbon particulate as well as carbon-dioxide and many un-desirable fire byproducts. The water used to extinguish fires not only becomes runoff and may transport pollutants into waterways and other portions of the environment, but is often treated, potable water that must be processed and transported into the City via a water utility service at some financial expense and expense to the City's overall carbon-footprint. Fires also damage structures and other built-environment infrastructure that ultimately must be removed and replaced, generally with an associated financial and carbon-footprint cost to

remove, manufacture, transport and reinstall the infrastructure. The adoption of a strong fire code ultimately serves to reduce the frequency, severity and cost of fires to society, environment, and the climate.

## RATIONALE FOR RECOMMENDATION

When the state adopts a new fire code, or as in the current case makes amendments to the California Fire Code that impact locally adopted amendments to the California Fire Code, the affected local amendments must be modified to remain compatible with the new state code language. In the case of Intervening Code Adoption Cycle mid-cycle amendments, these amendments do not always trigger the need for modification of local code adoptions. In the current case of the 2024 mid-cycle amendments, modifications of local amendments and findings are needed to preserve our local fire code amendments that account for Berkeley's particular topographic, geologic and climatic conditions. The fire and seismic danger and other local conditions, as described in detail in the attached resolution justify the proposed local amendments that are stricter than the California Fire Code.

# ALTERNATIVE ACTIONS CONSIDERED

None

#### **CONTACT PERSON**

Steven Riggs, Fire Marshal, Berkeley Fire Department, 981-5585.

#### Attachments

- 1 Ordinance "AMENDMENT OF SECTION 19.48.020 OF THE BERKELEY MUNICIPAL CODE ("AMENDMENTS TO THE CALIFORNIA FIRE CODE") TO MAINTAIN LOCAL AMENDMENTS TO, AND COMPATIBILITY WITH, RECENT CHANGES TO CALIFORNIA FIRE CODE LANGUAGE AND NUMBERING AS ENACTED BY THE STATE OF CALIFORNIA"
- 2 Resolution "ADOPTING FINDINGS AS TO LOCAL CLIMATIC, GEOLOGICAL AND TOPOGRAPHICAL CONDITIONS RENDERING REASONABLY NECESSARY VARIOUS ENUMERATED LOCAL FIRE AND BUILDING STANDARDS THAT ARE MORE STRINGENT THAN THOSE MANDATED BY THE CALIFORNIA FIRE CODE AND AMENDING RESOLUTION NO. 70,611-N.S."

ATTACHMENT 1

#### ORDINANCE NO. ##,###-N.S.

AMENDMENT OF SECTION 19.48.020 OF THE BERKELEY MUNICIPAL CODE ("AMENDMENTS TO THE CALIFORNIA FIRE CODE") TO MAINTAIN LOCAL AMENDMENTS TO, AND COMPATIBILITY WITH, RECENT CHANGES TO CALIFORNIA FIRE CODE AS ENACTED BY THE STATE OF CALIFORNIA

BE IT ORDAINED by the Council of the City of Berkeley as follows:

<u>Section 1.</u> That Paragraph DDD. of Section 19.48.020 of the Berkeley Municipal Code ("Amendments to the California Fire Code") is amended to read as follows:

DDD. **Section 4902.1 General [Amended subsection].** For the purpose of this chapter, certain terms are defined as follows:

**DIRECTOR.** Director of the California Department of Forestry and Fire Protection (CAL FIRE).

FIRE PROTECTION PLAN [Amended definition]. A document prepared for a specific <u>premises</u>, project or development, <u>either existing or proposed</u> for a Wildland-Urban Interface (WUI) area. It describes ways to minimize and mitigate potential for loss from wildfire exposure.

FIRE HAZARD SEVERITY ZONES. Geographical areas designated pursuant to California Public Resources Codes, Sections 4201 through 4204 and classified as Very High, High, or Moderate in State Responsibility Area or as Local Agency Very High Fire Hazard Severity Zones designated pursuant to California Government Code, Sections 51175 through 51189.

The California Code of Regulations, Title 14, Section 1280 entitles the maps of these geographical areas as "Maps of the Fire Hazard Severity Zones in the State Responsibility Area of California."

FIRE ZONE ONE [Additional definition] shall encompass the entire City of Berkeley except for Fire Zones Two and Three.

FIRE ZONE TWO [Additional definition] encompasses those areas designated as Combined Hillside District in the Official Zoning map of the City of Berkeley and those areas designated as Very High in the official Fire Hazard Severity Zones (FHSZ) map of the California Department of Forestry and Fire Protection (CAL FIRE), as they may be amended from time to time. The following properties, not part of the Combined Hillside District, are included in Fire Zone Two under the Very High designation of the FHSZ map: the eastern section of the University of California, Berkeley main campus, block number 2042 (Alameda County Assessor's parcel numbering (APN) system), to the east city line; all of the Clark-Kerr campus, block number 7690, to the east city line; all of block number 7680 in the City of Berkeley; portions of block number 1702 in the City of Berkeley. These additional parcels and their assigned street address are established in Section 19.28.030 of the Berkeley Municipal Code, Berkeley Building Code and are specified in Table 4902.1.

**Table 4902.1** 

Parcels Added to the Berkeley Combined Hillside District				
Parcel Number (APN)	Address			
048-7680-001-02	3 Tanglewood Road			
048-7680-002-01	5 Tanglewood Road			
048-7680-031-00	7 Tanglewood Road			
048-7680-019-00	11 Tanglewood Road			
048-7680-014-00	19 Tanglewood Road			
048-7680-032-01	25 Tanglewood Road			
048-7680-027-00	29 Tanglewood Road			
054-1702-067-00	10 Tanglewood Road			
054-1702-068-00	18 Tanglewood Road			
<u>054-1702-069-00</u>	22 Tanglewood Road			
<u>054-1702-070-00</u>	28 Tanglewood Road			
054-1702-063-00	2701 Belrose Avenue			
054-1702-076-00	2715 Belrose Avenue			
054-1702-075-00	2721 Belrose Avenue			
054-1702-074-00	2729 Belrose Avenue			
<u>054-1702-073-00</u>	2737 Belrose Avenue			
054-1702-112-00	2801 Claremont Boulevard			
054-1702-123-01	2811 Claremont Boulevard			
054-1702-122-00	2815 Claremont Boulevard			
<u>054-1702-120-01</u>	2821 Claremont Boulevard			
<u>054-1702-114-01</u>	2816 Claremont Avenue			
054-1702-115-00	2820 Claremont Avenue			
054-1702-072-00	3005 Garber Street			
054-1702-071-00	3015 Garber Street			
054-1702-113-00	3020 Garber Street			
<u>054-1702-116-00</u>	3017 Avalon Avenue			

<u>Fire Zone One is declared as a Very-High Fire Hazard Severity Zone and Wildland-Urban Interface area.</u>

FIRE ZONE 3 [Additional definition] encompasses those areas designated as Environmental Safety - Residential Districts on the Official Zoning Map of the City of Berkeley, as it may be amended from time to time. Fire Zone Three is declared as a Very-High Fire Hazard Severity Zone and Wildland-Urban Interface area.

FIRE-RESISTANT VEGETATION. Plants, shrubs, trees and other vegetation that exhibit properties, such as high moisture content, little accumulation of dead vegetation, and low sap or resin content, that make them less likely to ignite or contribute heat or spread flame in a fire than native vegetation typically found in the region.

[Note: The following sources contain examples of types of vegetation that can be considered fire-resistant vegetation (Fire-resistant Plants for Home Landscapes, A Pacific Northwest Extension publication; Home Landscaping for Fire, University of California Division of Agriculture and Natural Resources; Sunset Western Garden Book)].

IGNITION-RESISTANT MATERIAL. [Amended definition] A type of building material that complies with the requirements in Section 704A.2 in the California Berkeley Building Code.

**LOCAL RESPONSIBILITY AREAS (LRA).** Areas of the state in which the financial responsibility of preventing and suppressing fires is the primary responsibility of a city, county, city and county, or district.

**STATE RESPONSIBILITY AREA (SRA).** Lands that are classified by the Board of Forestry pursuant to Public Resources Code Section 4125 where the financial responsibility of preventing and suppressing wildfires is primarily the responsibility of the state.

**WILDFIRE**. Any uncontrolled fire spreading through vegetative fuels that threatens to destroy life, property, or resources as defined in Public Resources Code. Sections 4103 and 4104.

**WILDFIRE EXPOSURE.** One or a combination of radiant heat, convective heat, direct flame contact and burning embers being projected by vegetation fire to a structure and its immediate environment.

WILDLAND-URBAN INTERFACE (WUI).[Amended definition] A geographical area identified by the state as a "Fire Hazard Severity Zone" in accordance with the Public Resources Code, Sections 4201 through 4204, and Government Code, Sections 51175 through 51189, or other areas designated by the enforcing agency to be at a significant risk from wildfires. Berkeley Fire Zones 2 and 3 are designated as Wildland-Urban Interface areas. See Government Code Chapter 6.8 Very High Fire Hazard Severity Zones and Public Resources Code Article 9 Fire Hazard Severity Area for the applicable referenced sections.

<u>Section 2.</u> That Paragraphs UUU. through PPPP. of Section 19.48.020 of the Berkeley Municipal Code ("Amendments to the California Fire Code") are renumbered and amended to read as follows:

# UUU. <u>Section 4912 SUPPRESSION AND CONTROL OF HAZARDS IN WILDLAND-URBAN INTERFACE AREAS [Additional section]</u>

- VVV. <u>Section 4912.1 Permit [Additional subsection].</u> The fire code official is authorized to stipulate conditions for permits. Permits shall not be issued when public safety would be at risk, as determined by the fire code official.
- WWW. Section 4912.2 Restricted Entry [Additional subsection]. The fire code official shall determine and publicly announce when Wildland-Urban Interface areas shall be closed to entry and when such areas shall again be opened to entry. Entry on and occupation of Wildland-Urban Interface areas, except public roadways, inhabited areas or established trails and camp sites which have not been closed during such time when the Wildland-Urban Interface areas are closed to entry, is prohibited.

# **Exceptions:**

1) Residents and owners of private property within Wildland-Urban Interface areas and their invitees and guests going to or being upon their lands;

- 2) Entry, in the course of duty, by peace officers, and other duly authorized public officers, members of a fire department and members of the United States Forest Service
- XXX. Section 4912.3 Trespassing on Posted Property [Additional subsection]
- YYY. Section 4912.3.1 General [Additional subsection]. When the fire code official determines that a specific area within a Wildland-Urban Interface Fire Areas presents an exceptional and continuing fire danger because of the density of natural growth, difficulty of terrain, proximity to structures or accessibility to the public, such areas shall be closed until changed conditions warrant termination of closure. Such areas shall be posted as hereinafter provided.
- ZZZ. Section 4912.3.2 Signs [Additional subsection]. Approved signs prohibiting entry by unauthorized persons and referring to this section shall be placed on every closed area.
- AAAA. <u>Section 4912.3.3 Trespassing [Additional subsection].</u> Entering and remaining within areas closed and posted is prohibited.
  - **Exception:** Owners and occupiers of private or public property within closed and posted areas, their guests or invitees, and local, state and federal public officers and their authorized agents acting in the course of duty.
- BBBB. <u>Section 4912.4 Smoking [Additional subsection].</u> Lighting, igniting or otherwise setting fire to or smoking tobacco, cigarettes, pipes or cigars in Wildland-Urban Interface areas are prohibited.
  - **Exception:** Places of habitation or within the boundaries of established smoking areas or campsites as designated by the fire code official.
- CCCC. Section 4912.5 Spark Arresters [Additional subsection]. Chimneys used in conjunction with fireplaces, barbecues, incinerators or heating appliances in which solid or liquid fuel is used, upon buildings, structures or premises located within Wildland-Urban Interface areas shall be provided with a spark arrester.

  See Berkeley Building Code Section 705A.5 for specifications.
- DDDD. Section 4912.6 Tracer Bullets, Tracer Charges, Rockets and Model Aircraft [Additional subsection]. Tracer bullets and tracer charges shall not be possessed, fired or caused to be fired into or across Wildland-Urban Interface areas. Rockets, model planes, gliders and balloons powered with an engine, propellant or other feature liable to start or cause fire shall not be fired or projected into or across Wildland-Urban Interface Fire Areas.
- EEEE. <u>Section 4912.7 Explosives and Blasting [Additional subsection].</u> Explosives shall not be possessed, kept, stored, sold, offered for sale, given away, used, discharged, transported or disposed of within Wildland-Urban Interface areas except by permit from the fire code official.

- FFF. Section 4912.8 Fireworks [Additional subsection]. Fireworks shall not be used or possessed in Wildland-Urban Interface areas. The fire code official is authorized to seize, take, remove or cause to be removed fireworks in violation of this section.
  - **Exception:** Fireworks allowed by the fire code official under permit when not prohibited by applicable local or state laws, ordinances and regulations.
- GGG. <u>Section 4912.9 Apiaries [Additional subsection].</u> Lighted and smoldering material shall not be used in connection with smoking bees in or upon Wildland-Urban Interface areas except by permit from the fire code official.
- HHHH. <u>Section 4912.10 Open-Flame Devices [Additional subsection].</u> See Berkeley Fire Code Sections 308.1.6 Open Flame Devices and 308.1.6.1 Signals and Markers.
- IIII. <u>Section 4912.11 Outdoor Fires [Additional subsection].</u> Outdoor fires shall not be built, ignited or maintained in or upon Wildland-Urban Interface areas, except by permit from the fire code official.

Exception: Outdoor fires within habited premises or designated campsites, where such fires are built in a permanent barbecue, portable barbecue, outdoor fireplace, incinerator or grill and are a minimum of 30 feet (9144 mm) from a grass-, grain-, brush or forest-covered area.

<u>Permits shall incorporate such terms and conditions, which will reasonably safeguard public safety and property.</u>

Outdoor fires shall not be built, ignited or maintained in or upon Wildland-Urban Interface areas under the following conditions:

- 1. When high winds are blowing,
- 2. When a person age 17 or over is not present at all times to watch and tend such fire, or
- 3. When public announcement is made that open burning is prohibited.

  Permanent barbecues, portable barbecues, outdoor fireplaces, fire pits or grills shall not be used if solid or liquid fueled.
- JJJJ. <u>Section 4912.12 Incinerators and Fireplaces [Additional subsection].</u>
  Incinerators, outdoor fireplaces, fire pits, permanent barbecues and grills shall not be built, installed or maintained in Wildland-Urban Interface areas without prior approval of the fire code official. Existing incinerators, outdoor fireplaces, fire pits, permanent barbecues and grills shall be maintained in good repair and in a safe condition at all times. Openings in such appliances shall be provided with an approved spark arrester, screen or door.

**Exception:** When approved, unprotected openings in barbecues and grills necessary for proper functioning shall be allowed.

KKKK. <u>Section 4912.13 Dumping [Additional subsection].</u> Garbage, cans, bottles, papers, ashes, refuse, trash, rubbish or combustible waste material shall **not** be placed, deposited or dumped in or upon Wildland-Urban Interface areas or in, upon or along trails, roadways or highways in Wildland-Urban Interface areas.

**Exception:** Approved public and private dumping areas.

LLLL. <u>Section 4912.14 Disposal of Ashes [Additional subsection].</u> Ashes and coals shall not be placed, deposited or dumped in or upon Wildland-Urban Interface areas.

## **Exceptions:**

- 1. In the hearth of an established fire pit, camp stove or fireplace;
- 2. In a noncombustible container with a tight-fitting lid, which is kept or maintained in a safe location not less than 10 feet (3048mm) from combustible vegetation or structures;
- 3. Where such ashes or coals are buried and covered with 1 foot (304.8mm) of mineral earth not less than 25 feet (7620 mm) from combustible vegetation or structures.
- MMMM. Section 4912.15 Use of Fire Roads and Firebreaks [Additional subsection]. Motorcycles, motor scooters and motor vehicles shall not be driven or parked upon, and trespassing is prohibited upon, fire roads or firebreaks beyond the point where travel is restricted by a cable, gate or sign, without the permission of the property owner(s). Vehicles shall not be parked in a manner, which obstructs the entrance to a fire road or firebreak.

**Exception:** Public officers acting within their scope of duty. Radio and television aerials, guy wires thereto, and other obstructions shall not be installed or maintained on fire roads or fire breaks unless located 16 feet (4877 mm) or more above such fire road or firebreak.

- NNNN. Section 4912.16 Use of Motorcycles, Motor Scooters and Motor Vehicles

  [Additional subsection]. Motorcycles, motor scooters and motor vehicles shall not be operated within Wildland-Urban Interface areas, without a permit by the fire code official, except upon clearly established public or private roads.

  Permission from the property owner(s) shall be presented when requesting a permit.
- OOO. Section 4912.17 Tampering with Fire Department Locks, Barricades and Signs [Additional subsection]. Locks, barricades, seals, cables, signs and markers installed within Wildland-Urban Interface areas, by or under the control of the fire code official, shall not be tampered with, mutilated, destroyed or removed. Gates, doors, barriers and locks installed by or under the control of the fire code official shall not be unlocked.

PPPP. Section 4912.18 Liability for Damage [Additional subsection]. The expenses of fighting fires and securing emergencies, which result from a violation of this code, Chapter 6.15.030 of the Berkeley Municipal Code ("Unauthorized barbecues and fire on public property"), Sections 13000-13011 of the California Health and Safety Code, Sections 4421-4446 of the California Public Resources Code, or Sections 451, 451.5, 452 or 455 of the California Penal Code is a charge against the person(s) whose violation of the code section(s) caused the fire. Damages caused by such fires shall constitute a debt of such person(s) and shall be collectable by the fire code official in accordance with Section 107.7 of this code.

<u>Section 2.</u> Copies of this Ordinance shall be posted for two days prior to adoption in the display case located near the walkway in front of the Maudelle Shirek Building, 2134 Martin Luther King Jr. Way. Within 15 days of adoption, copies of this Ordinance shall be filed at each branch of the Berkeley Public Library and the title shall be published in a newspaper of general circulation.

## RESOLUTION NO. ##,###-N.S.

ADOPTING FINDINGS AS TO LOCAL CLIMATIC, GEOLOGICAL AND TOPOGRAPHICAL CONDITIONS RENDERING REASONABLY NECESSARY VARIOUS ENUMERATED LOCAL FIRE AND BUILDING STANDARDS THAT ARE MORE STRINGENT THAN THOSE MANDATED BY THE CALIFORNIA FIRE CODE AND AMENDING RESOLUTION NO. 70,611-N.S.

BE IT RESOLVED by the Council of the City of Berkeley as follows:

WHEREAS, Health & Safety Code §17958 allows the City to make modifications or changes to the California Fire Code and other regulations adopted pursuant to Health & Safety Code §17921(a) which result in more stringent local requirements; and

WHEREAS, Health & Safety Code §17925, §17958.5 and §17958.7 require that such changes be supported by findings made by the governing body that such more stringent local requirements are necessary because of "local climatic, geological or topographical conditions or factors"; and

WHEREAS, such findings must be made available as a public record and a copy thereof with each such modification or change shall be filed with the California Building Standards Commission; and

WHEREAS, on November 15, 2022, the City adopted Resolution No. 70,611-N.S. which found that each of the various changes or modifications to the California Fire Code then proposed and enumerated in that document were reasonably necessary because of local climatic, geological or topographical conditions or factors and conditions in the area encompassed by the City of Berkeley; and

WHEREAS, the City is proposing to adopt additional changes and modifications to the California Fire Code, as set forth below:

NOW THEREFORE, BE IT RESOLVED by the City Council that it finds that in addition to the changes and modifications enumerated in City of Berkeley Resolution No. 70,611-N.S. that the proposed additional changes or modifications to the California Fire Code which are enumerated below are reasonably necessary because of local conditions in the area encompassed by the City of Berkeley, as set forth below:

#### A. LOCAL CONDITIONS

- 1. Climatic Conditions.
- a. Discussion.

A significant portion of the City of Berkeley has been designated as a Local Agency Very High Fire Hazard Severity Zone (LAVHFHSZ) by the City in concert with the California Director of Forestry and Fire Protection. The requirement for evaluation and designation of LAVHFHSZ on a state-wide basis was mandated by AB 337 (the "Bates Bill") in response to the Oakland/Berkeley Hills Fire of 1991. Within the City of Berkeley those areas designated as Fire Zone 2 and Fire Zone 3 in the Berkeley Fire Code are formally classified as LAVHFHSZ. A major element of this designation as a LAVHFHSZ are fire weather conditions which develop within those areas. Fire weather is an integral part of local climatic conditions. Conditions conducive to the ignition and spread of wildfires occur more frequently during certain times of the year but this does not preclude the possibility that a serious fire could occur during other months of the year. The critical climate fire conditions create a situation conducive to rapidly moving, high intensity fires. Fires starting in the wildland areas along the easterly border of the City are likely to move rapidly westward into Berkeley's urban areas. Fires starting in Berkeley structures in the LAVHFHSZ are more likely to spread to surrounding landscape and structures and adjacent wildlands.

As previously stated, the October 20, 1991, Oakland/Berkeley Hills fire motivated State legislation requiring the designation of fire hazard severity zones in areas of local jurisdiction. This fire prompted the evacuation of thousands of residents, destroyed more than 3000 dwelling units (at least 70 of which were in Berkeley) and resulted in a total of 25 confirmed deaths in the Oakland-Berkeley area. Other significant fires have occurred in Berkeley.

In September 1923, critical climatic fire conditions were in effect and Berkeley sustained one of the most devastating fires in California's history up to that point. A fire swept over the range of the hills to the northeast of Berkeley and within two hours was attacking houses within the City limits. This fire burned a total of 130 developed acres. At least 584 Berkeley buildings were destroyed and about 30 others seriously damaged. By far the greater portion were single-family dwellings, but among the number were 63 apartments, 13 fraternity, sorority and students' house clubs and 6 hotels and boarding houses.

Conditions similar to the 1923 fire were in place in 1970 when a fire destroyed 37 homes in Berkeley and Oakland. In December of 1980, a small fire that started at Berkeley's northeast limits totally destroyed five homes within minutes. In each of these instances, critical climatic fire conditions were in place and matched patterns consistent from the 1923 through the 1991 fires creating hazardous conditions for fire ignition and spread.

# b. Summary.

Local climatic conditions of limited rainfall, low humidity, high temperatures and high winds along with existing building construction create extremely hazardous fire conditions that adversely affect the acceleration, intensity and size of fires in the City. The same climatic conditions may result in the concurrent occurrence of one or more fires, which may spread in the more populated areas of the City without adequate fire department personnel to protect against and control such a situation.

# 2. Geological Conditions.

#### a. Discussion.

The City of Berkeley is located in a region of high seismic activity and is traversed by the Hayward fault. It has the San Andreas earthquake fault to the west and the Calaveras earthquake fault to the east. All three faults are known to be active as evidenced by the damaging earthquakes they have produced in the last 100 years and can, therefore, be expected to do the same in the future. Of primary concern to Berkeley is the Hayward Fault, which has been estimated to be capable of earthquakes exceeding a magnitude of 7.0 on the Richter scale. It extends through many areas including Berkeley's Fire Zone 2 and 3 (both Local Agency Very High Fire Hazard Severity Zones). Intensified damage during an earthquake may be expected in the hillside areas which include Berkeley's Fire Zones 2 and 3 as they are located within or near the fault zone. Significant seismic events are commonly accompanied by ensuing fires in areas of heavy shaking. Based on the susceptibility of Berkeley's LAVHFHSZ (Fire Zone 2 and 3) to ignition and rapid uncontrollable fire spread, significant seismic activity in the Berkeley area could conceivably lead to an ensuing wildfire disaster.

#### b. Summary.

Local geological conditions include the potential for high seismic activity and severe shaking in the immediate areas of Fire Zones 2 and 3. The City of Berkeley is a densely populated area and has buildings and structures constructed over and near a vast array of fault systems capable of producing major earthquakes. It is common for significant seismic shaking to result in ensuing fires. The modifications cited herein are necessary to better limit the potential for loss of life and property damage as a result of seismic activity.

## 3. <u>Topographical Conditions</u>.

#### a. Discussion.

The City of Berkeley has many homes built throughout the urban portion of the Berkeley Hills that are reached by narrow and often winding paved streets which hamper access for fire apparatus and escape routes for residents. In addition, many of the hillside homes are on the extreme eastern edge of the City and require longer response times for the total required firefighting force. Panoramic Way and other hill neighborhoods with narrow and winding streets face the problem of isolation from the rest of the City.

In addition to the problems of emergency evacuation and access created by Berkeley's topography, the steepest portions of the City also coincide roughly with Berkeley Fire Zones 2 and 3 (both Local Agency Very High Fire Hazard Severity Zones). In addition to other factors such as fuel types and fire weather conditions, a key factor in determining the boundaries of a LAVHFHSZ include the topography of the terrain. Steep terrain is often associated with intense, fast moving wildfires that are terrain driven. Factors related to steeply sloping terrain aggravate the situation and create conditions such as the crowding of structures with limited defensible space to protect against

wildfires. As a result, fires can be expected to involve large groups of buildings in these areas.

## b. Summary.

Local topographical conditions include hillside housing with many narrow and winding streets in the abruptly rising Berkeley hills. These conditions create an extremely serious problem for the Fire Department when a fire or other disaster occurs. Many situations will result in the limiting or total blockage of fire department emergency vehicular traffic, overtaxed fire department personnel and a lack of resources for the suppression of fire in buildings, structures or vegetation in the City of Berkeley. These same conditions of sloping topography also contribute significantly to fire intensity and the rate of fire spread within Fire Zones 2 and 3.

# B. <u>REASONABLE NECESSITY</u>

The proposed changes and modifications to the California Fire Code are reasonably necessary due to the local climatic, geological and topographical conditions set forth above. They are further justified for the reasons set forth below.

In adopting the modifications proposed below, the City proposes to make certain substantive modifications to building standards whose effect is to impose more stringent requirements locally than are mandated by the California Fire Code. These are specifically listed below, but may be generally characterized as relating to the definition of and management within the Wildland-Urban Interface area and the Local Agency Very High Fire Hazard Severity Zone with the goal of improving the management of the Wildland-Urban Interface area. These more stringent local requirements are reasonably necessary to address risks created by local conditions set forth above for the following reasons:

1. Section 4902.1 is amended and Table 4902.1 is added to provide definitions related to local Wildland-Urban Interface (WUI) areas and Local Agency Very High Fire Hazard Severity Zones; it directs interested parties to appropriate BMC Chapter 19.28 sections (Berkeley Building Code) for building construction requirements in WUI areas; it imposes various non-building standard requirements for the management of vegetation and other aspects of the Wildland-Urban Interface (WUI) area. This building standard is necessary due to Berkeley's steep topography, Mediterranean climatic conditions, and geologic conditions that include a higher than normal likelihood of highly damaging seismic activity with the potential for ensuing fires. These factors result in an elevated risk of wildifres.

This amendment was originally one subject of the findings-of-fact Resolution No. 70,611-N.S. as adopted by the City Council of the City of Berkeley on November 15, 2022. These amendments and additions were subsequently adopted by Council on December 8, 2022. This section has been amended by the State of California in its Intervening Code Cycle Adoption process, and those amendments become effective on July 1, 2024. These local amendments are being revised and readopted to maintain compatibility with the California Fire Code.

2. Section 4912.12 (Incinerators and Fireplaces), is created which mandates that certain potential ignition sources within Wildland-Urban Interface (WUI) fire areas such as incinerators, outdoor fireplaces, fire pits, permanent barbecues and grills shall not be constructed without prior approval of the fire code official. Also, continued use of such constructed equipment (termed 'maintained' in the fire code ordinance) is prohibited unless the equipment is maintained in good repair and in a safe condition at all times. This section also requires that such equipment be provided with appropriate spark arrestors, similar to the requirements in the Berkeley Building Code for fixed mechanical equipment associated with structures and regulated under the Berkeley Building Code. This added section is required due to steep topography and Mediterranean climatic conditions. These conditions result in an elevated risk of wildfires.

This amendment in the form of an additional Section added to the local fire code adoption was originally one subject of the findings-of-fact Resolution No. 70,611-N.S., and adopted by the City Council of the City of Berkeley on November 15, 2022. This this added section was subsequently adopted by Council on December 8, 2022. This section has been renumbered and language related to the Wildland-Urban Interface area modified to maintain compatibility with the California Fire Code.

BE IT FURTHER RESOLVED by the Council of the City of Berkeley that certain local amendments to the fire code are not building standards more stringent than the provisions of the California Fire Code, but rather cover matters not addressed by that code as building standards, or are administrative in nature, as follows:

1. Added Sections 4912, 4912.1, 4912.2, 4912.3, 4912.3.1, 4912.3.2, 4912.3.3, 4912.4, 4912.5, 4912.6, 4912.7, 4912.8, 4912.9, 4912.10, 4912.11, 4912.13, 4912.14, 4912.15, 4912.16, 4912.17, and 4912.18 impose various non-building standard requirements for the suppression and control of fires in WUI areas. These non-building standards are necessary due to Berkeley's steep topography, Mediterranean climatic conditions, and geologic conditions that include a higher than normal likelihood of highly damaging seismic activity with the potential for ensuing fires. These factors result in an elevated risk of wildifres.

These amendments in the form of additions to the local fire code adoption were originally a subject of the findings-of-fact Resolution No. 70,611-N.S., which was adopted by the City Council of the City of Berkeley on November 15, 2022. These added sections were subsequently adopted by Council on December 8, 2022. These sections have been renumbered and language related to the Wildland-Urban Interface area modified to maintain compatibility with the California Fire Code