ORDINANCE NO. 2022-447

ORDINANCE OF THE TOWN COUNCIL OF THE TOWN OF PORTOLA VALLEY AMENDING CHAPTER 15.04 [BUILDING CODE] AND CHAPTER 15.10 [GREEN BUILDING] OF TITLE 15 [BUILDINGS AND CONSTRUCTION] OF THE PORTOLA VALLEY MUNICIPAL CODE ADOPTING LOCAL AMENDMENTS TO THE CALIFORNIA BUILDING CODE AND UPDATING HOME HARDENING AND CAL GREEN REQUIREMENTS

WHEREAS, the Town of Portola Valley ("Town") wishes to adopt a building code in accordance with law and to use the most updated regulations in the process of development in the Town; and

WHEREAS, because of the Town's unique local climatic, geologic and topographic conditions, as detailed in Exhibit A, the Town desires to make some amendments and additions to the California Building Code.

NOW, THEREFORE, the Town Council of the Town of Portola Valley does ORDAIN as follows:

<u>SECTION 1</u>: <u>REPEAL OF CODE</u>: Sections 15.04.010 [Building Code]; 15.04.020 [Amendments to the Building Code]; 15.04.030 [Administration of the Building Code]; 15.04.050 [Temporary Occupancy Permit] of Chapter 15.04 [Building Code]; and 15.10 [Green Building] of Title 15 [Buildings and Construction] of the Town of Portola Valley Municipal Code are hereby repealed.

SECTION 2: AMENDMENT OF CODE: Section 15.04.010 [Building Code] of Chapter 15.04 [Building Code] of Title 15 [Buildings and Construction] of the Town of Portola Valley Municipal Code is hereby added:

The town's building code is comprised of the following uniform codes:

- A. <u>2022 California Administrative Code</u> (Part 1 of Title 24) California Code of Regulations, California Building Standards Commission; and
- B. <u>2022 California Building Code</u>, <u>Volumes 1 and 2</u> (Part 2 of Title 24) California Code of Regulations, California Building Standards Commission Based on the 2021 International Building Code (IBC) published by the International Code Council (ICC), with *modifications*; and
- C. <u>2022 California Residential Code</u> (Part 2.5 of Title 24) California Code of Regulations, California Building Standards Commission and Appendices: Appendix H: Patio Covers; Appendix K: Sound Transmission and Appendix V: Swimming Pool Safety Act, based on the 2021 International Residential Code (IRC) published by the International Code Council, with *modifications*; and

- D. <u>2022 California Electrical Code</u> (Part 3 of Title 24) California Code of Regulations, California Building Standards Commission Based on the 2020 National Electrical Code (NEC) published by the National Fire Protection Association; and
- E. <u>2022 California Mechanical Code</u> (Part 4 of Title 24) California Code of Regulations, California Building Standards Commission Based on the 2021 Uniform Mechanical Code (UMC) published by the International Association of Plumbing and Mechanical Officials (IAPMO); [and]
- F. <u>2022 California Plumbing Code</u> (Part 5 of Title 24) California Code of Regulations, California Building Standards Commission based upon the 2021 Uniform Plumbing Code (UPC) published by the International Plumbing and Mechanical Officials (IAPMO) and Appendix K with modifications; [and]
- G. <u>2022 California Energy Code</u> (Part 6 of Title 24) California Code of Regulations, California Building Standards Commission; and
- H. <u>2022 California Historical Building Code</u> (Part 8 of Title 24), California Code of Regulations, California Building Standards Commission; and
- 2022 California Fire Code (Part 9 of Title 24) California Code of Regulations, California Building Standards Commission Based on the 2021 International Fire Code (IRC) published by the International Code Council; and
- J. <u>2022 California Existing Building Code</u> (Part 10 of Title 24) California Code of Regulations, California Building Standards Commission; and
- K. <u>2022 Green Building Standards Code (Cal Green)</u> (Part 11 of Title 24) California Code of Regulations, California Building Standards Commission; and
- L. <u>2022 California Referenced Standards Code</u> (Part 12 of Title 24) Adopted by the Building Standards Commission.

<u>SECTION 3</u>: <u>AMENDMENT OF CODE</u>. Section 15.04.020 [Amendments to the California Building Code] of Chapter 15.04 [Building Code] of Title 15 [Buildings and Construction] of the Town of Portola Valley Municipal Code is hereby added:

A. Subsection 101.1 of the California Building Code is hereby amended to read as follows:

[A] 101.1 Title.

These regulations shall be known as the Building Code of the Town of Portola Valley, hereinafter referred to as "this code".

B. Subsection 105.1 of the California Building Code is hereby amended to read as follows:

[A] 105.1 required.

Any owner or owner's authorized agent who intends to construct, enlarge, alter repair, move, demolish or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be performed, shall first make an application to the building official and obtain the required permit.

C. Subsection 105.2 of the California Building Code is hereby amended to read as follows:

[A] 105.2 Work exempt from permit.

Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:

- One-story detached accessory building used as a tool or storage shed, playhouse, and similar use provided the floor area does not exceed 120 square feet.
- 2. Movable cases, counters and partitions not over five feet nine inches high.
- Retaining walls that are not over four feet in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II or III-A Liquids.
- 4. Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons and the ratio of height to diameter or width does not exceed 2:1.
- 5. Platforms and walks, not more than 30 inches above grade and not over any basement or story below.
- 6. Painting, papering and similar finish work.
- 7. Window awnings; supported by an exterior wall for Group R, Division 3 (Single Family Residence), and Group U (Private Garage) Occupancies when projecting not more than 54 inches.
- 8. Prefabricated swimming pools accessory to a Group R, Division 3 Occupancy in which the pool walls are entirely above the adjacent grade, and if the capacity does not exceed 5,000 gallons.
 - D. Subsection 109.6 of the California Building Code is hereby amended to read

as follows:

[A] 109.6 Refunds.

The Building Official may authorize refunding of:

- 1. Any fee paid hereunder, which was erroneously paid or collected.
- 2. Not more than 80 percent of the permit fee paid when no work has been done under a permit issued in accordance with this code.
- 3. Not more than 80 percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or cancelled before any plan reviewing is done.

The Building Official shall not authorize refunding of any fee paid except on written application filed by the original permittee not later than 180 days after the date of the fee payment.

E. Subsection 111.3 of the California Building Code is hereby amended to read as follows:

[A] 111.3 Temporary occupancy.

The building official is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, provided that such portion or portions shall be occupied safely. The building official shall set a time period during which the temporary certificate of occupancy is valid. Even if a temporary occupancy permit has been obtained, in no event shall a building be sold or transferred until the final inspection has been signed by the town's building official.

- A. Upon request, the town's building official shall provide an applicant with an application for temporary occupancy permit and a list of the town's minimum requirements for temporary occupancy permit. The minimum requirements for temporary occupancy permit shall be developed by the town's building official at their sole discretion.
- B. The town's building official may at their sole discretion issue a temporary occupancy permit for the use of a portion or portions of a building if, and only if, the applicant provides a surety deposit in the form of a letter of credit from a savings institution and made payable to the town of Portola Valley or a cashier's check in the amount of ten thousand dollars.
 - Any costs of the town in enforcing the terms of the temporary occupancy permit or removing occupants from the premises shall be deducted from the surety deposit. If the costs to the town exceed the amount of the surety deposit, the applicant shall be responsible for immediately paying the town any deficiency.

- 2. The town may in its sole discretion require further deposits or bonds, in an amount not to exceed the cost of completion of the project, plus up to twenty percent to cover any costs incurred by the town in completing the project.
- C. The duration of a temporary occupancy permit shall not be more than one year from the date of approval of the temporary occupancy permit. Failure to complete the project within the lesser of one year or the time period indicated on the temporary occupancy permit may result in the immediate revocation of the temporary occupancy permit and eviction from the premises.
- D. If the project is not completed in the time set forth in the temporary occupancy permit, which in no event shall exceed one year, the applicant shall show cause for the failure to complete the project and submit a schedule for completion. The applicant must show cause and present a schedule to the town's building official within ten days of the expiration of the temporary occupancy permit or no extension or reinstatement of the temporary occupancy permit will be allowed. The town's building official shall have sole discretion whether to revoke or extend the temporary occupancy permit in light of the evidence concerning the failure to complete the project. The town's building official shall have sole discretion as whether or not the revised scheduled is acceptable. Within ten days of the applicant presenting evidence and a revised schedule, the town's building official shall either extend or revoke the temporary occupancy permit.
- E. If a temporary occupancy permit is revoked, the utilities will be disconnected from the project and abatement proceeding may occur in accordance with the town's municipal code and local, state and federal rules and regulations.
 - F. Subsection 113.1 of the California Building Code is hereby amended to read as follows:

[A] 113.1 General.

In order to hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be the Town Council. The board shall render all findings in writing to the appellant with a duplicate copy to the building official.

G. Subsection 114.4 of the California Building Code is hereby amended to read as follows:

[A] 114.4 Violation penalties.

Any person who commences any work for which a permit is required, such as, but not limited to: grading, demolition, or on a building, structure, electrical, gas, mechanical, fire protection or plumbing system before obtaining the necessary permits shall be subject to a fee established by fee resolution that shall be in addition to the required

permit fees. Double Building Permit Fees will apply at a minimum of \$500.00 plus \$500.00 fine may be added for each violation (type of construction) where a building permit should have been issued.

H. Subsection 701A.1 of the California Building Code is hereby amended to read as follows:

701A.1 Scope.

This chapter applies to building materials, systems and or assemblies used in the exterior design and construction of new buildings, additions to existing buildings, alterations to existing buildings and additions with alterations to existing buildings as defined in Section 702A.

I. Subsection 701A.2 of the California Building Code is hereby amended to read as follows:

701A.2 Purpose.

The purpose of this chapter is to establish minimum standards for the protection of life and property by increasing the ability of a building to resist the intrusion of flame or burning embers projected by a vegetation fire and contributes to a systematic reduction in conflagration losses.

J. Subsection 701A.3 of the California Building Code is hereby amended to read as follows:

701A.3 Application.

All New buildings, additions, alterations, and repairs shall comply with the provisions of this chapter. This shall include all buildings with residential, commercial, educational, institutional or similar occupancy type use, which shall be referred to in the section as "applicable building" (see definition in Section 702A) as well as new buildings and structures accessory to those applicable buildings.

Exceptions:

- 1. Group C occupancy special buildings conforming to the limitations specified in Section 450.4.1.
- 2. New Accessory buildings and miscellaneous structures specified in Section 710A shall comply with the requirements of that section.
- 3. Ornamental landscape structure (e.g. trellis, gazebo):
 - With a projected roof area that does not exceed 120 square feet; and
 - That is not within 30 feet of a property line.

- 4. An animal shade structure:
 - With a projected roof area that does not exceed 120 square feet; and
 - That is not within 30 feet of a property line.
- K. Section 702A of the California Building Code is hereby amended to include the following definition:

NEW BUILDING. For the purposes of this chapter, alterations, additions and additions that include alterations to existing buildings for which building permit(s) have been issued within any 12-month period that collectively exceeds more than 50 percent of the existing floor area, 50 percent of the existing wall area or when the combination of the percentages of affected floor area and affected wall area exceeds 50 percent are treated as new buildings. In calculating these percentages, the following guidelines shall apply:

- a Calculation of Percentage of Affected Floor Area (PFA): The floor area of any addition, all rooms affected by any addition, and the floor area of all rooms affected by structural changes made in the building, such as walls, columns, beams or girders, floor or ceiling joists and coverings, roof rafters, roof diaphragms, footings, piles or retaining walls or similar components, shall be included in computing the floor areas for applying this section.
- **b** Calculation of Percentage of Affected Wall Area (PWA): The calculated wall area affected shall include all interior and exterior walls where no studs are proposed to be remain or if some studs remain and/or if the surface of both sides of the studs are proposed to be removed such that one can see through the wall.
- c Calculation of Combination of Percentage of Affected Floor Area (PFA) and Wall Area (PWA): The combination of the percentage of affected floor as described above plus the percentage of wall area as described above (PFA + PWA > 50%).
 - L. Subsection 704A.4 of the California Building Code is hereby amended to read as follows:

704A.4 Alternative methods for determining ignition resistant material.

Any of the following shall be accepted as meeting the definition of ignition resistant material:

- 1. Noncombustible materials. Material that complies with the definition for noncombustible materials in Section 202.
 - M. Subsection 705A.2 of the California Building Code is hereby amended to read as follows:

705A.2 Roof Coverings.

The minimum roof coverings installed on buildings shall be Class A rated tested in accordance with ASTM E108 or UL 790 such as concrete, tile, metal or slate. Wood roof coverings are prohibited. Where the roofing profile has an airspace under the roof covering, installed over a combustible deck, a 72 lb. (32,7kg) cap sheet complying with ASTM D3909 Standard Specification for "Asphalt Rolled Roofing (Glass Felt) Surfaced with Mineral Granules," shall be installed over the roof deck. Bird stops shall be used ate the eaves when the profile fits, to prevent debris at the eave. Hip and ridge caps shall be mudded in to prevent intrusion of fire or embers.

Exceptions:

- 1. Roof covering replacement that affects 25% or less of the building structure.
- Cap Sheet is not required when no less than 1 inch of mineral wool or other noncombustible material is located between the roofing material and wood framing or deck.

Alternately, a Class A fire rated roof underlayment, tested in accordance with ASTM E108, shall be permitted to be used. If the sheathing consists of exterior fire-retardant-treated wood, the underlayment shall not be required to comply with a Class A classification. Bird stops shall be used ate the eaves when the profile fits, to prevent debris at the eave. Hip and ridge caps shall be mudded in to prevent intrusion of fire or embers.

N. Subsection 705A.3 of the California Building Code is hereby amended to read as follows:

707A.3 Exterior wall coverings.

Exterior wall coverings and exterior columns supporting roof structures and trellises shall be of noncombustible materials.

Exception:

- 1. Alterations to existing exterior wall coverings that affect less than 10% of the exterior of the building.
- Exterior columns supporting roof structures and trellises wrapped with noncombustible material. Ignition resistant or combustible veneers over noncombustible material is prohibited.
- O. Subsection 707A.5 of the California Building Code is hereby amended to read as follows:

707A.5 Open roof eaves.

Open roof eaves are prohibited.

Exceptions:

The following materials do not need protection:

- 1. Ignition-resistant fascia and other architectural trim boards
- P. Subsection 707A.6 of the California Building Code is hereby amended to read as follows:

707A.6 Enclosed roof eaves and roof eave soffits.

The exposed underside of enclosed roof eaves having either a boxed-in roof soffit with a horizontal underside, or sloping rafter tails with an exterior covering applied to the underside of the rafter tails, shall be protected by one or more of the following:

- 1. Noncombustible material.
- 2. Ignition-resistant material. The ignition-resistant material shall be labeled for exterior use and shall meet the requirements of Section R337.4.2.
- 3. Materials approved for not less than 1-hour fire resistance-rated construction on the exterior side, as tested in accordance with ASTM E119 or UL 263.
- Boxed-in roof eave soffit assemblies with a horizontal underside that meets the performance criteria in Section R337.7.11 when tested in accordance with the test procedures set forth in ASTM E2957.
- 5. Boxed-in roof eave soffit assemblies with a horizontal underside that meets the performance criteria in accordance with the test procedures set for the in SFM Standard 12-7A-3.

Exception to Section 707A.6: The following materials do not require protection:

- 1. Fascia and other architectural trim boards.
- Q. Subsection 707A.7 of the California Building Code is hereby amended to read as follows:

707A.7 Exterior porch ceilings.

The exposed underside of exterior porch ceilings shall be protected by one or more of the following:

- Noncombustible material.
- 2. Ignition-resistant material. The ignition-resistant material shall be labeled for

- exterior use and shall meet the requirements of Section R337.4.2.
- 3. Materials approved for not less than 1-hour fire resistance-rated construction on the exterior side, as tested in accordance with ASTM E119 or UL 263.
- Porch ceiling assemblies with a horizontal underside that meets the performance criteria in Section R337.7.11 when tested in accordance with the test procedures set forth in ASTM E2957.
- Porch ceiling assemblies with a horizontal underside that meets the performance criteria in accordance with the test procedures set for the in SFM Standard 12-7A-3.

Exception to Section 707A.7: The following materials do not require protection:

- 1. Fascia and other architectural trim boards.
- R. Subsection 707A.8 of the California Building Code is hereby amended to read as follows:

707A.8 Floor projections.

The exposed underside of a cantilevered floor projection where a floor assembly extends over an exterior wall shall be protected by one or more of the following:

- 1. Noncombustible material.
- 2. Ignition-resistant material. **The ignition-resistant** material shall be labeled for exterior use and shall meet the requirements of Section 704A.2.
- 3. Materials approved for not less than 1-hour fire resistance-rated construction on the exterior side, as tested in accordance with ASTM E119 or UL 263.
- 4. Porch ceiling assemblies with a horizontal underside that meets the performance criteria in Section 707A.11 when tested in accordance with the test procedures set forth in ASTM E2957.
- 5. Porch ceiling assemblies with a horizontal underside that meets the performance criteria in accordance with the test procedures set for the in SFM Standard 12-7A-3.

Exception to Section 707A.8: Architectural trim boards.do not require protection.

S. Subsection 707A.9 of the California Building Code is hereby amended to read as follows:

707A.9 Underfloor protections.

The underfloor area of elevated or overhanging building shall be enclosed to grade in accordance with the requirements of this chapter or the underside of

exposed underfloor shall be protected by one or more of the following:

- 1. Noncombustible material.
- 2. Ignition-resistant material. **The ignition-resistant** material shall be labeled for exterior use and shall meet the requirements of Section 704A.2.
- 3. Materials approved for not less than 1-hour fire resistance-rated construction on the exterior side, as tested in accordance with ASTM E119 or UL 263.
- 4. Porch ceiling assemblies with a horizontal underside that meets the performance criteria in Section 707A.11 when tested in accordance with the test procedures set forth in ASTM E2957.
- Porch ceiling assemblies with a horizontal underside that meets the performance criteria in accordance with the test procedures set for the in SFM Standard 12-7A-3.

Exception to Section 707A.9: Structural columns and beams do not require protection when constructed with sawn lumber or glue-laminated wood with the smallest minimum nominal dimension of 4 inches (102 mm). Sawn or glue-laminated planks shall be splined, tongue-and-groove, or set closed together and spiked.

T. Subsection 707A.10 of the California Building Code is hereby amended to read as follows:

707A.10 Underside of appendages.

The underside of overhanging appendages shall be enclosed to grade in accordance with the requirements of this chapter, or the underside of the exposed under-floor shall be protected by one or more of the following:

- 1. Noncombustible material.
- 2. Ignition-resistant material. **The ignition-resistant** material shall be labeled for exterior use and shall meet the requirements of Section 704A.2.
- 3. Materials approved for not less than 1-hour fire resistance-rated construction on the exterior side, as tested in accordance with ASTM E119 or UL 263.
- 4. Porch ceiling assemblies with a horizontal underside that meets the performance criteria in Section 707A.11 when tested in accordance with the test procedures set forth in ASTM E2957.
- Porch ceiling assemblies with a horizontal underside that meets the performance criteria in accordance with the test procedures set for the in SFM Standard 12-7A-3.

Exception to Section 707A.10: Structural columns and beams do not require protection when constructed with sawn lumber or glue-laminated wood with the smallest minimum nominal dimension of 4 inches (102 mm). Sawn or glue-laminated

planks shall be splined, tongue-and-groove, or set closed together and spiked.

U. Subsection 709A.3 of the California Building Code is hereby amended to read as follows:

709A.3 Decking surfaces.

The walking surface material of decks, porches, balconies and stairs shall be constructed with one of the following materials:

- 1. Material that complies with the performance requirements of Section 709A.4 when tested in accordance with both ASTM E2632 and ASTM E2726.
- 2. Ignition-resistant material that complies with the performance requirements of Section 704A.3.
- 3. Material that complies with the performance requirements of both SFM Standard 12-7A-4 and Section 704A.3.
- 4. Noncombustible material.
- V. Subsection 709A.6 of the California Building Code is hereby added to read as follows:

709A.6 Deck structure protection

Decks or similar structures less than four feet above grade shall be protected as follows:

- 1. The structure of exterior decks shall be enclosed from the underside of the deck to grade with solid, noncombustible or ignition resistant materials per 703A. of the California Building Code.
 - W. Subsection 710A.1 of the California Building Code is hereby amended to read as follows:

710A.1 General.

Group U occupancy accessory buildings and miscellaneous structures shall be constructed to conform to the requirements of this chapter.

X. Subsection 710A.3 of the California Building Code is hereby amended to read as follows:

710A.3 Where required.

Attached accessory buildings and miscellaneous structures shall be constructed in

accordance with the structure to which they are attached. Detached accessory buildings and miscellaneous structures, unless specially exempted per subsection 701A.3 or exempted from permit as specified in Section 105.2-shall be constructed as follows:

- Fences and gates located within 10 feet of an applicable building shall be noncombustible. Fences and gates located 10 feet or more from an applicable building are not required to comply with the provisions of this chapter.
- 2. Accessory buildings and detached miscellaneous structures, including those with a floor area of 120 square feet or less, constructed at a distance of less than 30 feet from a property line shall comply with the provisions of this chapter.
- Y. Subsection 710A.4 of the California Building Code is hereby amended to read as follows:

710A.4 Roof construction.

Roofs of accessory buildings required to be constructed entirely of noncombustible or ignition-resistant materials shall comply with the requirements of chapter 7A and chapter 15. Roof coverings shall comply with section 705A.2 as amended by this ordinance.

Z. Subsection R902.1 of the California Residential Code is hereby amended to read as follows:

R902.1 Roof covering materials.

Roofs shall be covered with materials as set forth in sections 904 and 905. A minimum Class A roofing shall be installed. Class A roofing is required by this section to be listed shall be tested in accordance with UL 790 or ASTM E 108. Wood roof coverings are prohibited.

AA. Subsection 903.2 of the California Building Code is hereby added to read as follows:

903.2 Where required.

An approved automatic sprinkler system in buildings and structures shall be provided in the locations described in 903.2.1 through 903.2.12 and Sections 903.2.14 through 903.2.21.

Exceptions:

1. An approved automatic sprinkler system shall not be required

in existing structures where repairs, alterations, additions and additions that include alterations are made to unsprinklered, existing buildings when building permit(s) have been issued within any 12-month period that collectively do not exceed more than 50 percent of the existing floor area, 50 percent of the existing wall area or when the combination of the percentages of affected floor area and affected wall area exceeds 50 percent. The following guidance shall be used to calculate these percentages:

- a. Calculation of Percentage of Affected Floor Area (PFA): The floor area of any addition, all rooms affected by any addition, and the floor area of all rooms affected by structural changes made in the building, such as walls, columns, beams or girders, floor or ceiling joists and coverings, roof rafters, roof diaphragms, footings, piles or retaining walls or similar components, shall be included in computing the floor areas for applying this section.
- b. Calculation of Percentage of Affected Wall Area (PWA): The calculated wall area affected shall include all interior and exterior walls where no studs are proposed to be remain or if some studs remain and/or if the surface of both sides of the studs are proposed to be removed such that one can see through the wall.
- c. Calculation of Combination of Percentage of Affected Floor Area (PFA) and Wall Area (PWA): The combination of the percentage of affected floor as described above plus the percentage of wall area as described above (PFA + PWA > 50%).
- BB. Subsection 1031.2 of the California Building Code is hereby amended to read as follows:

1031.2 Where required.

In addition to the means of egress required by this chapter, emergency escape and rescue openings shall be provided in Group R occupancies.

Basements and sleeping rooms below the fourth story above grade plane shall have not fewer than one emergency escape and rescue opening in accordance with this section. Where basements contain one or more sleeping rooms, an emergency escape and rescue opening shall be required in each sleeping room but shall not be required in

adjoining areas of the basement. Such openings shall open directly into a public way or to a yard or court that opens to a public way.

Exceptions:

- In group R-1 and R-2 occupancies constructed of Type I, Type IIA, Type IIIA or Type IV construction equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1.
- Group R-2.1 occupancies meeting the requirements for delayed egress in accordance with Section 1010.2.13 may have operable windows that are breakable in sleeping rooms permanently restricted to a maximum of 4-inch open position.
- 3. Basements with a ceiling height of less than 80 inches (2032 mm) shall not be required to have emergency escape and rescue openings.
- 4. Emergency escape and rescue openings are not required from basements or sleeping rooms that have an exit door or exit access door that opens directly into a public way or to a yard, court or exterior egress balcony that opens to a public way.
- 5. Basements without habitable spaces and having not more than 200 square feet (18.6 m²) in floor area shall not be required to have emergency escape and rescue openings.
- 6. Storm shelters are not required to comply with this section where the shelter is constructed in accordance with ICC 500.
- CC. Section 1405.1 of the California Building Code is hereby deleted in its entirety and amended to read as follows:

1405.1 Combustible exterior wall coverings.

Exterior wall coverings shall be of noncombustible materials.

Exception: Alterations to existing exterior wall coverings that affect less than 10% of the exterior of the building.

DD. Section 1505.1 of the California Building Code is hereby deleted in its entirety and amended to read as follows:

[BF] 1505.1 General.

The minimum roof coverings installed on buildings shall be Class A rated tested in accordance with ASTM E108 or UL 790 such as concrete, tile, metal or slate. Wood roof coverings are prohibited.

Exception:

1. Roof covering replacement that affects 25% or less of the building structure.

EE. Table 2308.6.1 of section 2308.6.1 of the California Building Code is hereby amended as follows:

The title of Table 2308.6.1 is amended to read:

Table 2308.6.1 Wall Bracing Requirements^{a,f,g}

Footnotes are added as follows:

Footnotes "f" and "g" are added to Table 2308.6.1, to read:

- f. Methods PBS, HPS, and SFB are not permitted in Seismic Design Categories D or E.
- g. Methods GB, DWB and PCP are not permitted in Seismic Design Category E.

SECTION 4: AMENDMENT OF CODE. Section 15.04.030 [Amendments to California Residential Code] of Chapter 15.04 [Building Code] of Title 15 [Buildings and Construction] of the Town of Portola Valley Municipal Code is hereby added:

Section 15.04.030

FF. Subsection R101.1 of the California Residential Code is hereby amended to read as follows:

R101.1 Title.

These regulations shall be known as the Residential code of the Town of Portola Valley, hereinafter referred to as "this code".

GG. Subsection R105.2 of the California Residential Code is hereby amended to read as follows:

R105.2 Work exempt from permit.

Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:

- 1. One-story detached accessory building used as a tool or storage shed, playhouse, and similar use provided the floor area does not exceed 120 square feet.
- 2. Movable cases, counters and partitions not over five feet nine inches high.
- 3. Retaining walls that are not over four feet in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II or III-A Liquids.
- 4. Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons and the ratio of height to diameter or width does not exceed 2:1.
- 5. Platforms and walks, not more than 30 inches above grade and not over any basement or story below.
- 6. Painting, papering and similar finish work.
- 7. Window awnings; supported by an exterior wall for Group R, Division 3 (Single Family Residence), and Group U (Private Garage) Occupancies when projecting not more than 54 inches.
- 8. Prefabricated swimming pools accessory to a Group R, Division 3 Occupancy in which the pool walls are entirely above the adjacent grade, and if the capacity does not exceed 5,000 gallons.
 - HH. Subsection R108.5 of the California Residential Code is hereby amended to read as follows:

R108.5 Refunds.

The Building Official may authorize refunding of:

- 1. Any fee paid hereunder, which was erroneously paid or collected.
- 2. Not more than 80 percent of the permit fee paid when no work has been done under a permit issued in accordance with this code.
- 3. Not more than 80 percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or cancelled before any plan reviewing is done.

The Building Official shall not authorize refunding of any fee paid except on written application filed by the original permittee not later than 180 days after the date of the fee payment.

II. Subsection R110.4 of the California Residential Code is hereby amended to read as follows:

R110.4 Temporary occupancy.

The building official is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, provided that such portion or portions shall be occupied safely. The building official shall set a time period during which the temporary certificate of occupancy is valid. Even if a temporary occupancy permit has been obtained, in no event shall a building be sold or transferred until the final inspection has been signed by the town's building official.

- A. Upon request, the town's building official shall provide an applicant with an application for temporary occupancy permit and a list of the town's minimum requirements for temporary occupancy permit. The minimum requirements for temporary occupancy permit shall be developed by the town's building official at their sole discretion.
- B. The town's building official may at their sole discretion issue a temporary occupancy permit for the use of a portion or portions of a building if, and only if, the applicant provides a surety deposit in the form of a letter of credit from a savings institution and made payable to the town of Portola Valley or a cashier's check in the amount of ten thousand dollars.
 - Any costs of the town in enforcing the terms of the temporary occupancy permit or removing occupants from the premises shall be deducted from the surety deposit. If the costs to the town exceed the amount of the surety deposit, the applicant shall be responsible for immediately paying the town any deficiency.
 - 2. The town may in its sole discretion require further deposits or bonds, in an amount not to exceed the cost of completion of the project, plus up to twenty percent to cover any costs incurred by the town in completing the project.
- C. The duration of a temporary occupancy permit shall not be more than one year from the date of approval of the temporary occupancy permit. Failure to complete the project within the lesser of one year or the time period indicated on the temporary occupancy permit may result in the immediate revocation of the temporary occupancy permit and eviction from the premises.
- D. If the project is not completed in the time set forth in the temporary occupancy permit, which in no event shall exceed one year, the applicant shall show cause for the failure to complete the project and submit a schedule for completion. The applicant must show cause and present a schedule to the town's building official within ten days of the expiration of the temporary occupancy permit or no extension or reinstatement of the temporary occupancy permit will be allowed. The town's building official shall have sole discretion whether to revoke or extend the temporary occupancy permit in light of the evidence concerning the failure to complete the project. The town's building official shall have sole discretion as whether or not the revised

- scheduled is acceptable. Within ten days of the applicant presenting evidence and a revised schedule, the town's building official shall either extend or revoke the temporary occupancy permit.
- E. If a temporary occupancy permit is revoked, the utilities will be disconnected from the project and abatement proceeding may occur in accordance with the town's municipal code and local, state and federal rules and regulations.
- JJ. Subsection R112.1 of the California Residential Code is hereby amended to read as follows:

R112.1 General.

In order to hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be the Town Council. The board shall render all findings in writing to the appellant with a duplicate copy to the building official.

KK. Subsection R113.4 of the California Residential Code is hereby amended to read as follows:

R113.4 Violation penalties.

Any person who commences any work for which a permit is required, such as, but not limited to: grading, demolition, or on a building, structure, electrical, gas, mechanical, fire protection or plumbing system before obtaining the necessary permits shall be subject to a fee established by fee resolution that shall be in addition to the required permit fees. Double Building Permit Fees will apply at a minimum of \$500.00 plus \$500.00 fine may be added for each violation (type of construction) where a building permit should have been issued.

LL. Subsection R301.2 of the California Residential Code is hereby amended to read as follows:

R301.2 Climatic and geographic design criteria.

Buildings shall be constructed in accordance with the provisions of this code as limited by the provisions of this section. Additional criteria shall be established by the local jurisdiction and set forth in Table R301.2.

CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND		SEISMIC				
SNOW LOAD	Speed ^d (mph)	Topographic effects ^k	Special wind region ^l	Wind-borne debris zone ^m	DESIGN CATEGORY ^f	
No	91 -102 (Risk category dependent)	No	No	No	D-E	

SUBJECT TO DAMAGE FROM						
Weathering ^a	Frost line depth ^b	Termite ^c	BARRIER UNDER- LAYMENT REQUIRED ^h	FLOOD HAZARDS ⁹	AIR FREEZING INDEX ⁱ	MEAN ANNUAL TEMP ^j
No	No	No	No	PV Muni Code Section 18.32	NA	58.55

For SI: 1 pound per square foot = 0.0479 kPa, 1 mile per hour = 0.447 m/s.

- a. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The weathering column shall be filled in with the weathering index, "negligible," "moderate" or "severe" for concrete as determined from Figure R301.2(3). The grade of masonry units shall be determined from ASTM C34, C55, C62, C73, C90, C129, C145, 0216 or C652.
- b. The frost line depth may require deeper footings than indicated in Figure R403.1(1). The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.
- c. The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.
- d. The jurisdiction shall fill in this part of the table with the wind speed from the basic wind speed map [Figure R301.2(4)A]. Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.
- e. Temperatures shall be permitted to reflect local climates or local weather experience as determined by the building official.
- f. The jurisdiction shall fill in this part of the table with the seismic design category determined from Section R301.2.2.1.

g. The jurisdiction shall fill in this part of the table with (a) the date of the jurisdiction's entry into the National Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas), (b) the date(s) of the Flood Insurance Study and (c) the panel numbers and dates of the currently effective F1RMs and FBFMs or other flood hazard map adopted by the authority having jurisdiction, as amended.

h. In accordance with Sections R905.1.2, R905.4.3.1, 8905.5.3.1, R905.6.3.1, R905.7.3.1 and R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall fill in this part of the table with "NO."

- i. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Figure R403.3(2) or from the 100-year (99 percent) value on the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)."
- j. The jurisdiction shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)."

k. In accordance with Section R301.2.1.5, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall indicate "NO" in this part of the table.

I. In accordance with Figure R301.2(4)A, where there is local historical data documenting unusual wind conditions, the jurisdiction shall fill in this part of the table with "YES" and identify any specific requirements, Otherwise, the jurisdiction shall indicate "NO" in this part of the table.

m. In accordance with Section R301.2.1.2.1. the jurisdiction shall indicate the wind-borne debris wind zone(s). Otherwise, the jurisdiction shall indicate "NO" in this part of the table.

MM. Subsection R310.1 of the California Residential Code is hereby amended to read as follows:

R310.1 Emergency escape and rescue opening required.

Basements, habitable attics and every sleeping room shall have not less than one operable emergency escape and rescue opening. Where basements contain one or more sleeping rooms, an emergency escape and rescue opening shall be required in each sleeping room. Emergency escape and rescue openings shall open directly into a public way.

Exceptions:

1. Basements with a ceiling height of less than 80 inches (2032 mm)

- shall not be required to have emergency escape and rescue openings.
- Emergency escape and rescue openings are not required from basements or sleeping rooms that have an exit door or exit access door that opens directly into a public way or to a yard, court or exterior egress balcony that opens to a public way.
- 3. Basements without habitable spaces and having not more than 200 square feet (18.6 m²) in floor area shall not be required to have emergency escape and rescue openings.
- 4. Storm shelters are not required to comply with this section where the shelter is constructed in accordance with ICC 500.
- NN. Subsection R310.7 of the California Residential Code is hereby amended to read as follows:

R310.7 Alterations or repairs of existing basement.

New sleeping rooms created in an existing basement shall be provided with emergency escape and rescue opening in accordance with Section 310.1. Other than new sleeping rooms, where existing habitable basements undergo alteration or repairs, an emergency escape and rescue opening is not required.

- OO. Subsection R310.7.1 of the California Residential Code is hereby deleted.
- PP. Subsection R313.1 of the California Residential Code is hereby amended to read as follows:

R313.1 Townhouse automatic fire sprinkler systems.

An automatic fire sprinkler system shall be installed in townhouses.

Exception: An automatic residential fire sprinkler system shall not be required where repairs, additions or alterations are made to existing townhouses that do not have automatic residential fire sprinkler systems installed when building permit(s) have been issued within any 12-month period that do not collectively exceed more than 50 percent of the existing floor area, 50 percent of the existing wall area or 50 percent of the combination of affected floor area and affected wall area percentages. In calculating these percentages, the following guidelines shall apply:

a. Calculation of Percentage of Affected Floor Area (PFA): The floor area of any addition, all rooms affected by any addition, and the floor area of all rooms affected by structural changes made in the building, such as walls, columns, beams or girders, floor or ceiling joists and coverings, roof rafters, roof diaphragms, footings, piles or retaining walls or similar

components, shall be included in computing the floor areas for applying this section.

b. Calculation of Percentage of Affected Wall Area (PWA): The calculated wall area affected shall include all interior and exterior walls where no studs are proposed to be remain or if some studs remain and/or if the surface of both sides of the studs are proposed to be removed such that one can see through the wall.

c. Calculation of Combination of Percentage of Affected Floor Area (PFA) and Wall Area (PWA): The combination of the percentage of affected floor as described above plus the percentage of wall area as described above (PFA + PWA < 51%).

R313.1.1 Design and Installation.

Automatic residential fire sprinkler systems for townhouses shall be designed and installed in accordance with section R313 or NFPA 13D.

QQ. Subsection R313.2 of the California Residential Code is hereby amended to read as follows:

R313.2 One and two-family dwelling automatic fire sprinkler systems.

An automatic fire sprinkler system shall be installed in one and two-family dwellings. **Exceptions:**

- 1. An automatic residential fire sprinkler system shall not be required where repairs, alterations, additions and additions that include alterations to existing buildings for which building permit(s) have been issued within any 12-month period that do not collectively exceed more than 50 percent of the existing floor area, 50 percent of the existing wall area or 50 percent of the combination of affected floor area and affected wall area percentages. In calculating these percentages, the following guidelines shall apply:
 - a. Calculation of Percentage of Affected Floor Area (PFA): The floor area of any addition, all rooms affected by any addition, and the floor area of all rooms affected by structural changes made in the building, such as walls, columns, beams or girders, floor or ceiling joists and coverings, roof rafters, roof diaphragms, footings, piles or retaining walls or similar components, shall be included in computing the floor

areas for applying this section.

- b. Calculation of Percentage of Affected Wall Area (PWA): The calculated wall area affected shall include all interior and exterior walls where no studs are proposed to be remain or if some studs remain and/or if the surface of both sides of the studs are proposed to be removed such that one can see through the wall.
- c. Calculation of Combination of Percentage of Affected Floor Area (PFA) and Wall Area (PWA): The combination of the percentage of affected floor as described above plus the percentage of wall area as described above (PFA + PWA > 50%).
- 2. Residential fire sprinkler system shall not be required for an accessory dwelling unit, if all the following are met:
 - 2.1 The unit meets the definition of an Accessory Dwelling Unit as defined in the Government Code section 65852.2
 - 2.2 The existing primary residence does not have automatic fire sprinklers.
 - 2.3 The accessory detached dwelling unit does not exceed 1200 square feet in size and is located in compliance with the setbacks of the base zoning district at required by the Portola Valley Municipal Code
 - 2.4 The unit is on the same lot as the primary residence.

R313.2.1 Design and Installation.

Automatic residential fire sprinkler systems shall be designed and installed in accordance with section R313 or NFPA 13D.

RR. Subsection R328.1 of the California Residential Code is hereby amended to read as follows:

R328.1 General.

Energy storage systems (ESS) shall comply with the provisions of this section.

Exceptions:

- 1. ESS less than 1 kWh (3.6 megajoules)
- SS. Subsection R337.1.1 of the California Residential Code is hereby amended to read as follows:

R337.1.1 Scope.

This chapter applies to building materials, systems and or assemblies used in the exterior design and construction of new buildings, additions to existing buildings, alterations to existing buildings and additions with alterations to existing buildings as specified in Section R337.1.3.

TT. Subsection R337.1.2 of the California Residential Code is hereby amended to read as follows:

R337.1.2 Purpose.

The purpose of Section R337 is to establish minimum standards for the protection of life and property by increasing the ability of a building to resist the intrusion of flame or burning embers projected by a vegetation fire and contributes to a systematic reduction in conflagration losses.

UU. Subsection R337.1.3 of the California Residential Code is hereby amended to read as follows:

R337.1.3 Application.

All New buildings, additions, alterations, and repairs shall comply with the provisions of this section. This shall include all buildings with residential, commercial, educational, institutional or similar occupancy type use, which shall be referred to in the section as "applicable building" (see definition in Section R337.2) as well as new buildings and structures accessory to those applicable buildings.

Exceptions:

Group C occupancy special buildings conforming to the limitations specified in Section 450.4.1 of the *California Building Code*,

- New Accessory buildings and miscellaneous structures specified in Section R337.10 shall comply with the requirements of that section.
- 2. Ornamental landscape structure (e.g. trellis, gazebo):
 - With a projected roof area that does not exceed 120 square feet; and
 - That is not within 30 feet of a property line.
- 3. An animal shade structure:
 - With a projected roof area that does not exceed 120 square feet; and
 - That is not within 30 feet of a property line.

VV. Section R337.2 of the California Residential Code is hereby amended to include the following Definition:

NEW BUILDING. For the purposes of Section R337, alterations, additions and additions that include alterations to existing buildings for which building permit(s) have been issued within any 12-month period that collectively exceeds more than 50 percent of the existing floor area, 50 percent of the existing wall area or when the combination of the percentages of affected floor area and affected wall area exceeds 50 percent are treated as new buildings. In calculating these percentages, the following guidelines shall apply:

- d Calculation of Percentage of Affected Floor Area (PFA): The floor area of any addition, all rooms affected by any addition, and the floor area of all rooms affected by structural changes made in the building, such as walls, columns, beams or girders, floor or ceiling joists and coverings, roof rafters, roof diaphragms, footings, piles or retaining walls or similar components, shall be included in computing the floor areas for applying this section.
- e Calculation of Percentage of Affected Wall Area (PWA): The calculated wall area affected shall include all interior and exterior walls where no studs are proposed to be remain or if some studs remain and/or if the surface of both sides of the studs are proposed to be removed such that one can see through the wall.
- f Calculation of Combination of Percentage of Affected Floor Area (PFA) and Wall Area (PWA): The combination of the percentage of affected floor as described above plus the percentage of wall area as described above (PFA + PWA > 50%).
 - WW. Subsection R337.4.4 Exception 3 of the California Residential Code is hereby amended to read as follows:

R337.4.4 Alternative methods for determining ignition resistant material.

Any of the following shall be accepted as meeting the definition of ignition resistant material:

- 1. Noncombustible materials. Material that complies with the definition for noncombustible materials in Section R202.
 - XX. Subsection R337.5.2 of the California Residential Code is hereby amended to read as follows:

R337.5.2 Roof Coverings.

The minimum roof coverings installed on buildings shall be Class A rated tested in accordance with ASTM E108 or UL 790 such as concrete, tile, metal or slate. Wood roof

coverings are prohibited. Where the roofing profile has an airspace under the roof covering, installed over a combustible deck, a 72 lb. (32,7kg) cap sheet complying with ASTM D3909 Standard Specification for "Asphalt Rolled Roofing (Glass Felt) Surfaced with Mineral Granules," shall be installed over the roof deck. Bird stops shall be used ate the eaves when the profile fits, to prevent debris at the eave. Hip and ridge caps shall be mudded in to prevent intrusion of fire or embers.

Exceptions:

- 1. Roof covering replacement that affects 25% or less of the building structure.
- 2. Cap Sheet is not required when no less than 1 inch of mineral wool or other noncombustible material is located between the roofing material and wood framing or deck.

Alternately, a Class A fire rated roof underlayment, tested in accordance with ASTM E108, shall be permitted to be used. If the sheathing consists of exterior fire-retardant-treated wood, the underlayment shall not be required to comply with a Class A classification. Bird stops shall be used ate the eaves when the profile fits, to prevent debris at the eave. Hip and ridge caps shall be mudded in to prevent intrusion of fire or embers.

YY. Subsection R337.7.3 of the California Residential Code is hereby amended to read as follows:

R337.7.3 Exterior wall coverings.

Exterior wall coverings and exterior columns supporting roof structures and trellises shall be of noncombustible materials.

Exception:

- 1. Alterations to existing exterior wall coverings that affect less than 10% of the exterior of the building.
- 2. Exterior columns supporting roof structures and trellises wrapped with noncombustible material. Ignition resistant or combustible veneers over noncombustible material is prohibited.
- ZZ. Subsection R337.7.5 of the California Residential Code is hereby amended to read as follows:

R337.7.5 Open roof eaves.

Open roof eaves are prohibited.

Exceptions:

The following materials do not need protection:

- 1. Ignition-resistant fascia and other architectural trim boards.
- AAA. Subsection R337.7.5.6 of the California Residential Code is hereby amended to read as follows:

R337.7.6 Enclosed roof eaves and roof eave soffits.

The exposed underside of enclosed roof eaves having either a boxed-in roof soffit with a horizontal underside, or sloping rafter tails with an exterior covering applied to the underside of the rafter tails, shall be protected by one or more of the following:

- 1. Noncombustible material.
- 2. Ignition-resistant material. The ignition-resistant material shall be labeled for exterior use and shall meet the requirements of Section R337.4.2.
- 3. Materials approved for not less than 1-hour fire resistance-rated construction on the exterior side, as tested in accordance with ASTM E119 or UL 263.
- 4. Boxed-in roof eave soffit assemblies with a horizontal underside that meets the performance criteria in Section R337.7.11 when tested in accordance with the test procedures set forth in ASTM E2957.
- 5. Boxed-in roof eave soffit assemblies with a horizontal underside that meets the performance criteria in accordance with the test procedures set for the in SFM Standard 12-7A-3.

Exception to Section R337.7.6: The following materials do not require protection:

- 1. Fascia and other architectural trim boards.
- BBB. Subsection R337.7.7 of the California Residential Code is hereby amended to read as follows:

R337.7.7 Exterior porch ceilings.

The exposed underside of exterior porch ceilings shall be protected by one or more of the following:

- 1. Noncombustible material.
- 2. Ignition-resistant material. **The ignition-resistant** material shall be labeled for exterior use and shall meet the requirements of Section R337.4.2.
- 3. Materials approved for not less than 1-hour fire resistance-rated construction on the exterior side, as tested in accordance with ASTM E119 or UL 263.

- 4. Porch ceiling assemblies with a horizontal underside that meets the performance criteria in Section R337.7.11 when tested in accordance with the test procedures set forth in ASTM E2957.
- 5. Porch ceiling assemblies with a horizontal underside that meets the performance criteria in accordance with the test procedures set for the in SFM Standard 12-7A-3.

Exception to Section R337.7.7: The following materials do not require protection:

1. Fascia and other architectural trim boards.

CCC. Subsection R337.7.8 of the California Residential Code is hereby amended to read as follows:

R337.7.8 Floor projections.

The exposed underside of a cantilevered floor projection where a floor assembly extends over an exterior wall shall be protected by one or more of the following:

- 1. Noncombustible material.
- 2. Ignition-resistant material. **The ignition-resistant** material shall be labeled for exterior use and shall meet the requirements of Section R337.4.2.
- 3. Materials approved for not less than 1-hour fire resistance-rated construction on the exterior side, as tested in accordance with ASTM E119 or UL 263.
- 4. Porch ceiling assemblies with a horizontal underside that meets the performance criteria in Section R337.7.11 when tested in accordance with the test procedures set forth in ASTM E2957.
- 5. Porch ceiling assemblies with a horizontal underside that meets the performance criteria in accordance with the test procedures set for the in SFM Standard 12-7A-3.

Exception to Section R337.7.8: Architectural trim boards.do not require protection.

DDD. Subsection R337.7.9 of the California Residential Code is hereby amended to read as follows:

R337.7.9 Underfloor protections.

The underfloor area of elevated or overhanging building shall be enclosed to grade in accordance with the requirements of this chapter or the underside of exposed underfloor shall be protected by one or more of the following:

Noncombustible material.

- 2. Ignition-resistant material. **The ignition-resistant** material shall be labeled for exterior use and shall meet the requirements of Section R337.4.2.
- 3. Materials approved for not less than 1-hour fire resistance-rated construction on the exterior side, as tested in accordance with ASTM E119 or UL 263.
- 4. Porch ceiling assemblies with a horizontal underside that meets the performance criteria in Section R337.7.11 when tested in accordance with the test procedures set forth in ASTM E2957.
- 5. Porch ceiling assemblies with a horizontal underside that meets the performance criteria in accordance with the test procedures set for the in SFM Standard 12-7A-3.

Exception to Section R337.7.9: Structural columns and beams do not require protection when constructed with sawn lumber or glue-laminated wood with the smallest minimum nominal dimension of 4 inches (102 mm). Sawn or glue-laminated planks shall be splined, tongue-and-groove, or set closed together and spiked.

EEE. Subsection R337.7.10 of the California Residential Code is hereby amended to read as follows:

R337.7.10 Underside of appendages.

The underside of overhanging appendages shall be enclosed to grade in accordance with the requirements of this chapter, or the underside of the exposed under-floor shall be protected by one or more of the following:

- 1. Noncombustible material.
- 2. Ignition-resistant material. **The ignition-resistant** material shall be labeled for exterior use and shall meet the requirements of Section R337.4.2.
- 3. Materials approved for not less than 1-hour fire resistance-rated construction on the exterior side, as tested in accordance with ASTM E119 or UL 263.
- 4. Underside of appendage assemblies with a horizontal underside that meets the performance criteria in Section R337.7.11 when tested in accordance with the test procedures set forth in ASTM E2957.
- Underside of appendage assemblies with a horizontal underside that meets the performance criteria in accordance with the test procedures set for the in SFM Standard 12-7A-3.

Exception to Section R337.7.10: Structural columns and beams do not require protection when constructed with sawn lumber or glue-laminated wood with the smallest minimum nominal dimension of 4 inches (102 mm). Sawn or glue-laminated planks shall be splined, tongue-and-groove, or set closed together and spiked.

FFF. Subsection R337.9.3 of the California Residential Code is hereby amended to read as follows:

R337.9.3 Decking surfaces.

The walking surface material of decks, porches, balconies and stairs shall be constructed with one of the following materials:

- 1. Material that complies with the performance requirements of Section R337.9.4 when tested in accordance with both ASTM E2632 and ASTM E2726.
- 2. Ignition-resistant material that complies with the performance requirements of Section R337.9.4.
- 3. Material that complies with the performance requirements of both SFM Standard 12-7A-4 and Section R337.4.3.
- Noncombustible material.
- GGG. Subsection R337.9.6 of the California Residential Code is hereby added to read as follows:

R337.9.6 Deck structure protection.

Decks or similar structures less than four feet above grade shall be protected as follows:

- 1. The structure of exterior decks shall be enclosed from the underside of the deck to grade with solid, noncombustible or ignition resistant materials per R337.4 of the California Residential Code.
- HHH. Subsection R337.10.1 of the California Residential Code is hereby amended to read as follows:

R337.10.1 General.

Group U occupancy accessory buildings and miscellaneous structures shall be constructed to conform to the requirements of this chapter.

III. Subsection R337.10.3 of the California Residential Code is hereby amended to read as follows:

R337.10.3 Where required.

Attached accessory buildings and miscellaneous structures shall be constructed in accordance with the structure to which they are attached. Detached accessory buildings and miscellaneous structures, unless specially exempted per subsection R337.1.3 or exempted from permit as specified in Section R105 shall be constructed as follows:

 Fences and gates located within 10 feet of an applicable building shall be noncombustible. Fences and gates located 10 feet or more

- from an applicable building are not required to comply with the provisions of this chapter.
- Accessory buildings and detached miscellaneous structures, including those with a floor area of 120 square feet or less, constructed at a distance of less than 30 feet from a property line shall comply with the provisions of this chapter.
- JJJ. Subsection R337.10.4 of the California Residential Code is hereby amended to read as follows:

R337.10.4 Roof construction.

Roofs of accessory buildings required to be constructed entirely of noncombustible or ignition-resistant materials shall comply with the requirements of Section R337 and chapter 9. Roof coverings shall comply with section R337.5.2 as amended by this ordinance.

KKK. Table R602.10.3(3) of subsection R602.10.3 of the California Residential Code is hereby amended as follows:

The title of Table R602.10.3(3) is amended to read:

TABLE R602.10.3(3)^{i, j} Bracing Requirements Based On Seismic Design Category Footnotes are added as follows:

Footnotes "i" and "j" are added to Table R602.10.3(3), to read:

- i. Methods PBS, HPS, SFB and CS-SFB are not permitted in Seismic Design Categories D₀, D₁, and D₂.
- j. Methods GB, DWB and PCP are not permitted in Seismic Design Categories D_0 , D_1 , and D_2 where S_1 is greater than or equal to 0.75.
- JJJ. Subsection R902.1 of the California Residential Code is hereby amended to read as follows:

R902.1 Roof covering materials.

Roofs shall be covered with materials as set forth in sections 904 and 905. A minimum Class A roofing shall be installed. Class A roofing is required by this section to be listed shall be tested in accordance with UL 790 or ASTM E 108. Wood roof coverings are prohibited.

LLL. Subsection R902.1.1 of the California Residential Code is hereby amended as follows:

R902.1.1 Roof coverings within fire hazard severity zones.

The entire roof covering of every existing structure where more than 25 percent of the total roof area is replaced within any one-year period, where the addition of new roof area exceeds 25 percent of the existing roof area, the entire roof covering of every new building and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall meet the requirements of Section R337.5.2.

MMM. Subsection R902.1.2 of the California Residential Code is hereby amended as follows:

R902.1.2 Roof coverings in all other areas.

The entire roof covering of every existing structure where more than 25 percent of the total roof area is replaced within any one-year period, where the addition of new roof area exceeds 25 percent of the existing roof area, the entire roof covering of every new building and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall meet the requirements of Section R337.5.2.

NNN. Subsection R902.2 of the California Residential Code is hereby deleted in its entirety.

R902.2 Fire retardant treated shingles and shakes. Fire- retardant treated wood shakes and shingles are wood shakes and shingles complying with UBC Standard 15-3 or 15-4 which are impregnated by the full-cell vacuum-pressure process with fire-retardant chemicals, and which have been qualified by UBC Standard I5-2 for use on Class A, B or C roofs. Fire retardant-treated wood shakes and shingles shall comply with ICC-ES EG/07 and with the weathering requirements contained in Health and Safety Code Section 13/32.7 (j). Each bundle shall bear labels from an ICBO accredited quality control agency identifying their roof-covering classification and indicating their compliance with ICC-ES EGJ07 and with the weathering requirements contained in Health and Safety Code Section 13132.7U).

Health and Safety Code Section 13132.7 (j) No wood roof covering materials shall be sold or applied in this state unless both of the following conditions are met:

- (1) The materials have been approved and listed by the State Fire Marshal as complying with the requirements of this section.
- (2) The materials have passed at least five years of the 210-year natural weathering test. The 10-year natural weathering test required by this subdivision shall be conducted in accordance with Standards 15-2 of the 1994 edition of the Uniform Building Code at a testing facility recognized by the State Fire Marshal.

<u>SECTION 5</u>: <u>AMEMDMENT OF CODE</u>. Section 15.04.040 [Amendments to the California Electrical Code] of Chapter 15.04 [Building Code] of Title 15 [Buildings and Construction] of the Town of Portola Valley Municipal Code is hereby added:

(Reserved)

SECTION 6: AMEMDMENT OF CODE. Section 15.04.050 [Amendments to the California Mechanical Code] of Chapter 15.04 [Building Code] of Title 15 [Buildings and Construction] of the Town of Portola Valley Municipal Code is hereby added:

(Reserved)

SECTION 7: AMEMDMENT OF CODE. Section 15.04.060 [Amendments to the California Plumbing Code] of Chapter 15.04 [Building Code] of Title 15 [Buildings and Construction] of the Town of Portola Valley Municipal Code is hereby added with the following:

OOO. Subsection 1211.8 **Earthquake Actuated Gas Shutoff Valves**, of the California Plumbing Code is hereby adopted.

SECTION 8: AMEMDMENT OF CODE. Section 15.04.070 [Amendments to the California Energy Code] of Chapter 15.04 [Building Code] of Title 15 [Buildings and Construction] of the Town of Portola Valley Municipal Code is hereby created with the following:

(Reserved)

SECTION 9: AMEMDMENT OF CODE. Section 15.04.080 [Amendments to the California Green Building Standards Code] of Chapter 15.04 [Building Code] of Title 15 [Buildings and Construction] of the Town of Portola Valley Municipal Code is hereby created with the following:

PPP. Section 101.12 of the California Green Building Standards Code is hereby added to added to read as follows:

101.12 Final determination of compliance.

Final determination of compliance and good faith effort to comply. Prior to the scheduling of a final building inspection for a covered project, the planning director or his/her designee shall review the documentation submitted by the applicant, and determine whether the applicant has achieved the required compliance of Subsections 4.106.4.1, 4.106.5, 4.106.5.1, 4.106.5.2, 4.305, and 5.106.13 and/or demonstrate that measures are in place to assure compliance not later than one year after approval of final building inspection. If the planning director or his/her designee determines that the applicant has met the requirements of the above referenced subsections for the project, the final building inspection may proceed, provided the covered project has received approval of

all other inspections required by the chief building official. If the planning director or his/her designee determines that the requirements of the above referenced subsections have not been achieved, the planning director or his/her designee shall find one of the following:

- 1. Good faith effort to comply: When an applicant submits a request in writing to the planning director or his/her designee for approval of a good faith effort to comply, the planning director or his/her designee shall determine that the applicant has made a good faith effort to comply with this chapter when finding that either
 - a. The cost for providing green building documentation or assuring compliance is disproportionate to the overall cost of the project, or
 - b. The green building materials and technologies on the green building checklist are no longer available or not yet commercially available, or
 - c. at least eighty percent of the above referenced subsections have been achieved, and measures are in place to assure full compliance not later than one year after approval of the final building inspection.

Determination of a good faith effort to comply shall be made separately for each item on the green building project checklist. Granting of a good faith effort to comply for one item does not preclude the need for the applicant to comply with the other items on the green building checklist.

- 2. Non-compliant project. If the planning director or his/her designee determines that the applicant has not made a good faith effort to comply with above referenced subsections, or if the applicant fails to submit the documentation required within the required time period, then the project shall be determined to be non-compliant, and the final inspection and approval for the project shall be withheld. A final inspection shall not take place until the applicant has implemented equivalent alternate measures approved by the planning director or his/her.
- 3. Non-compliance. If, upon inspection, the building official or planning director determines that the covered project does not comply with the approved plans or above referenced subsections, a stop order shall be issued if the planning director or his/her designee determines that continuation of construction activities will jeopardize the project's ability to meet the required compliance threshold. The stop order shall remain in effect until project has been brought into compliance with the approved plans and/or checklist.

QQQ. Section 101.13 of the California Green Building Standards Code is hereby added to added to read as follows:

101 .13 Hardship or infeasibility exemption.

If an applicant for a covered project believes that circumstances exist that make it a hardship or infeasible to meet the requirements of Subsections 4.106.4.1, 4.106.5, 4.106.5.1, 4.106.5.2, 4.305, and 5.106.13, the applicant may request an exemption as set forth below. In applying for an exemption, the burden is on the applicant to show hardship or infeasibility.

- 1. Application. Any request for an exemption must be included at the time of application submittal. The applicant shall indicate the maximum threshold of compliance he or she believes is feasible for the covered project and the circumstances that he or she believes create a hardship or make it infeasible to fully comply with this chapter. Circumstances that constitute hardship or infeasibility include, but are not limited to, the following:
 - a. There is conflict with the compatibility of the above referenced sections with other town goals, such as those requiring historic preservation;
 - b. There is conflict with the compatibility of the above referenced sections and the California Building Standards Code;
 - c. There is conflict with the compatibility of the above referenced sections and the town's zoning ordinance and/or architectural review criteria; and/or
 - d. There is a lack of commercially available green building materials and technologies to comply with the above referenced sections.
- 2. Review by Architectural and Site Control Commission. For any covered project for which an exemption is requested and architectural and site control review is required, the architectural and site control commission shall provide a recommendation to the planning director or their designee regarding whether the exemption shall be granted, conditionally granted or denied, along with its recommendation on the project. For any project for which an exemption is requested based on the historic character of the building or site, the town historian shall provide a recommendation to the planning director or their designee regarding whether the exemption shall be granted or denied and shall determine whether the project is consistent with the Secretary of the Interior's Standards for Historic Rehabilitation.
- 3. Decision by Planning Director (or their designee). The planning director or their designee shall make a determination based on the information provided. The planning director or his/her designee shall determine the maximum feasible threshold of compliance reasonably achievable for the project. The decision of the planning director or their designee shall be provided to the applicant in writing.
 - a. If the planning director or their designee determines that it is a hardship or is infeasible for the applicant to meet the requirements of this chapter, the request shall be granted. Notwithstanding, the applicant shall be required to comply with this chapter in all other respects and shall be required to achieve, in accordance with this chapter, the threshold of compliance determined to be reasonably achievable by planning director or their designee.
 - b. If the planning director or their designee determines that it is reasonably possible for the applicant to fully meet the requirements of this chapter, the request shall be denied. The project and compliance documentation shall be modified to comply with this chapter prior to further review of any pending planning or building application.

c. The planning director or their designee's decision shall be final.

RRR. Subsection 102.3.1 of the California Green Building Standards Code is hereby added to read as follows:

102.3.1 Third party verification.

Third party verification of compliance for applicable building measures of this code is required and shall be provided by a Green Building Specialist as defined in chapter 2 of this code.

SSS. Section 202 of the California Green Building Standards Code is hereby amended to add the following definitions:

ALL-ELECTRIC BUILDING: An all-electric building is a building that has no natural gas or propane plumbing installed within the building, and that uses electricity as the source of energy for its space heating, water heating, cooking appliances, and clothes drying appliances. All Electric Buildings may include solar thermal pool heating.

APPLIED WATER TURF CALCULATOR: An applied water turf calculator is a tool that uses data and methodology from the California Department of Water Resources to estimate the irrigation water requirements for turf minus any water supplied by effective rainfall and effective ground water seepage. The calculator uses the evapotranspiration of applied water (ETaw) for cool-season and warm-season turf that was calculated based on a six-year period of climate data specific to a 4x4 km grid spacing within the town.

GOOD FAITH EFFORT: A good faith effort means a project that has not met the required compliance threshold, but for extenuating reasons or reasons beyond the control of the applicant, the planning director or his/her designee has found that the project meets the good faith effort provisions of Subsection 101.12.

GREEN BUILDING SPECIALIST: A green building specialist is a person that is LEED certified for the building type, trained through Build It Green as a certified green building professional, or similar qualifications as approved by the planning director or their designee.

RAINWATER CATCHMENT SYSTEM: Rainwater catchment system means the collected precipitation from rooftops and other above-ground impervious surfaces that is stored in catchment tanks for later use.

TURF: Turf means a ground cover surface of mowed grass. All of the following qualify as turf: annual bluegrass, Kentucky bluegrass, Perennial ryegrass, Red fescue, and tall

fescue (cool-season grasses). Bermuda grass, Kikuyu grass, Seashore Paspalum, St. Agustine grass, Zoysia grass, and Buffalo (warm-season grasses).

TTT. Section 202 of the California Green Building Standards Code is hereby amended to incorporate the following amendment to the term below:

NEWLY CONSTRUCTED (or NEW CONSTRUCTION). A newly constructed building (or new construction) does not include additions, alterations or repairs. For the purposes of this code, additions, alterations and additions that include alterations to existing low-rise residential buildings for which building permit(s) have been issued within any 12-month period that collectively exceeds more than 50 percent of the existing floor area, 50 percent of the existing wall area or when the combination of the percentages of affected floor area and affected wall area exceeds 50 percent are treated as newly constructed (or new construction). In calculating these percentages, the following guidelines shall apply:

- (1) Calculation of Percentage of Affected Floor Area (PFA): The floor area of any addition, all rooms affected by any addition, and the floor area of all rooms affected by structural changes made in the building, such as walls, columns, beams or girders, floor or ceiling joists and coverings, roof rafters, roof diaphragms, footings, piles or retaining walls or similar components, shall be included in computing the floor areas for applying this section.
- (2) Calculation of Percentage of Affected Wall Area (PWA): The calculated wall area affected shall include all interior and exterior walls where no studs are proposed to be remain or if some studs remain and/or if the surface of both sides of the studs are proposed to be removed such that one can see through the wall.
- (3) Calculation of Combination of Percentage of Affected Floor Area (PFA) and Wall Area (PWA): The combination of the percentage of affected floor as described above plus the percentage of wall area as described above (PFA + PWA > 50%).
- UUU. Subsection 301.1.1 of the California Green Building Standards Code is hereby amended to read as follows:

301.1.1 Additions and alterations.

[HCD] the mandatory provisions of Chapter 4 shall be applied to additions and alterations of existing residential buildings where the addition or alteration increases the building's conditioned area, volume or size. The requirements shall apply only to and/or within the specific area of the addition or alterations.

The mandatory provisions of Section 4.06.4.2 may apply to additions or alterations of existing parking facilities or the addition of new parking facilities serving existing multifamily buildings. See Section 4.106.4.3 for application.

NOTE: Repairs including, but not limited to, resurfacing, restriping, and repairing or maintaining existing lighting fixtures are not considered alterations for the purposes of this section.

Exception:

All residential construction additions, alterations, repairs, and/or accessory dwelling unit conversions that include the installation of a new or the replacement, upgrade or relocation of an existing air conditioning condensing unit and/or the replacement/upgrade to the main electric panel shall comply with Section 4.106.5.2.

VVV. Subsection 4.106.4.1 of the California Green Building Standards Code is hereby amended to read as follows:

4.106.4.1 New one- and two-family dwellings and townhomes with attached private garages.

All new one- and two family dwellings and townhomes shall have an electric vehicle (EV) ready space supplied by a minimum 40-ampere 208/240 branch circuit.

4.106.4.1.1 Identification.

The service panel or subpanel circuit directory shall identify the overcurrent protective device as "EV READY". The raceway termination shall be permanently and visibly marked as "EV READY".

WWW. Section 4.106.5 of the California Green Building Standards Code is hereby added to read as follows:

4.106.5 Buildings Electrification.

A Newly constructed building shall comply with Section 1.406.5.1. Additions and alterations to existing buildings shall comply with Section 1.406.5.2.

XXX. Section 4.106.5.1 of the California Green Building Standards Code is hereby added to read as follows:

4.106.5.1 Newly Constructed Buildings.

Newly constructed buildings and gas-fired outdoor amenities (such as outdoor kitchens,

grills, pools, spas, fireplaces, firepits and outdoor heaters) shall be constructed as allelectric buildings.

YYY. Section 4.106.5.2 of the California Green Building Standards Code is hereby added to read as follows:

4.106.5.2 Residential additions, alterations and accessory dwelling unit conversions.

All residential construction additions, alterations, repairs, and/or accessory dwelling unit conversions that do not meet the definition of newly constructed that include the installation of a new or replacement, upgrade or relocation of an existing air conditioning condensing unit and/or the replacement/upgrade to the main electric panel shall comply with the following:

- 1. The installation of a new or replacement, upgrade or relocation of an existing air conditioning condensing unit shall be replaced with a reverse cycle air conditioning condensing unit (heat pump).
- 2. The replacement/upgrade to the main electric panel shall have:
 - a. The electrical capacity for and reservation of breaker space in the panel to accommodate the existing single-family electrical load and the future electrification of:
 - An electric stove and oven if the current stove and/or oven are gas:
 - An electric clothes dryer if the current clothes dryer is gas;
 - One level 2 electric vehicle charging equipment (EVCE);
 - Photovoltaic panels (PV); and
 - For a 240-volt circuit capable of providing electricity to operate a HPWH of comparable size to the existing gas fired water heater but a minimum of 30 amps per water heater.
 - b. All reserved breaker spaces shall be permanently marked as "For Future EVCE, PV and HPWH use".
 - c. A dedicated 240-volt branch circuit shall be installed within three (3) feet from the existing water heater location and shall be rated at 30 amps minimum. Both ends of the unused conductor shall be labeled with the word "spare", be identified as 240 V ready.

Exception: Multifamily buildings as defined in section 15.10.030 where the water heaters are located in each dwelling unit.

ZZZ. Section 4.304.2 of the California Green Building Standards Code is hereby added to read as follows:

4.304.2 Reduction of potable water use on turf.

For all projects with landscapes that include the use of turf, install rainwater catchment system. Irrigation needs of turf should be calculated using the Applied Water for Turf Calculator. All rainwater catchment systems must be installed in compliance with California Plumbing Code in effect at the time of Building permit application.

- 1. Rainwater Catchment System Size. The rainwater catchment system size shall be determined by using the Applied Water for Turf Calculator. The rainwater catchment system will need to be sized in order to satisfy 50 percent of the estimated annual water demands for the first 500 square feet of turf installed on the project. The rainwater catchment system will need to be sized in order to satisfy 100 percent of the estimated annual water demands for installed turf that is greater than 500 square feet.
- Alternative. A fully installed graywater system connected to an irrigation system
 that can satisfy all of the annual water demands of turf as identified in the Applied
 Water for Turf Calculator can be used as an alternative to installing a rainwater
 catchment system.

AAAA. Section 4.305 of the California Green Building Standards Code is hereby amended to read as follows:

4.305 Graywater "Ready" Infrastructure [LR].

Install graywater "ready" systems as outlined below. Additional plumbing piping is installed to permit the discharge from all clothes washers and all applicable fixtures from bathrooms located above grade to allow for future installation of a distributed irrigation system, either subsurface or treated. All graywater "ready" systems must be installed in compliance with the California Plumbing Code in effect at the time of Building permit application.

- 1. Identify an appropriate location for possible future installation of a graywater treatment system, including storage tanks.
- 2. Include either a separate multiple pipe outlet or a diverter valve and an outside "stub-out" installation on clothes washing machine hook-ups, to allow separate discharge of graywater direct for irrigation.
- 3. Include a building drain(s) for lavatories, showers, and bathtubs, segregated from drains for all other plumbing fixtures, connected to the black water pipe a minimum

of three (3) feet from the building foundation.

- 4. Provide power supply for future graywater treatment system.
- The graywater system shall be comprised of purple piping. The diverter valve on the clothes washing machine system shall be labeled as "LAUNDRY-TO-LANDSCAPE CAPABLE."

Exception:

Accessory dwelling units that include laundry connections shall only be required to include a diverter valve and an outside "stub-out" installation on the clothes washing machine hook-up, to allow separate discharge of graywater direct for irrigation. The diverter valve on the clothes washing machine system shall be labeled as "LAUNDRY-TO-LANDSCAPE CAPABLE."

BBBB. Section 5.106.13 of the California Green Building Standards Code is hereby added to read as follows:

5.106.13 Building electrification.

Newly constructed buildings shall be constructed as all-electric buildings.

Exception:

The Building Official may grant an exception for cooking needs or for newly constructed public agency buildings as needed for emergency services.

SECTION 10. ENVIRONMENTAL REVIEW. Pursuant to the Guideline Section 15061 (b)(3) of the California Environmental Quality Act (CEQA) this ordinance is exempt from CEQA, as it does not have a potential for causing a significant effect on the environment.

<u>SECTION 11</u>. <u>SEVERABILITY</u>. If any part of this ordinance is held to be invalid or inapplicable to any situation by a court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance or the applicability of this ordinance to other situations.

<u>SECTION 12</u>. <u>EFFECTIVE DATE; POSTING.</u> This Ordinance shall become effective on January 1, 2023 and shall be posted within the Town in three public places. Any development project receiving entitlement approval(s) from the Town on or before January 1, 2023 shall be exempt from the new CalGreen local amendments specified in Section 9 of the ordinance. Notwithstanding this exception, any such project shall still be subject to 4.304.2 and 4.305 of Section 9 of this ordinance.

INTRODUCED: October 12, 2022

PASSED: October 26, 2022

AYES: Aalfs, Derwin, Hughes, Roberts

NOES: Wernikoff

ABSTENTIONS:

ABSENT:

By: _____ Craig Hughes

Mayor

ATTEST:

Melissa Thurman, MMC

EXHIBIT A FINDINGS FOR LOCAL AMENDMENTS

Pursuant to State Law, including but not limited to Sections 13143.5, 18941.5, 17958.5 and 17958.7 of the California Health and Safety Code, the Town Council of the Town of Portola Valley finds that the changes or modifications to the Building Code set forth in Ordinance No. 2021-__ are reasonably necessary due to certain local climatic, geologic and topographic conditions as described below.

I. CLIMATIC

(a) Conditions

Precipitation ranges from 15 to 24 inches per year with an average of approximately 20 inches per year. Ninety-six percent of the precipitation falls during the months of October through April, and four percent from May through September, leaving a dry period of at least five months each year. Relative humidity remains in the middle range most of the time, ranging from 45 to 65 percent in the winter, but occasionally falling as low as 15 percent. Temperatures from June through September average above 80°F. It is not unusual to experience several continuous days with temperatures in the mid to high 90s. Prevailing winds in the area come from the west. However, winds are experienced from virtually every direction at one time or another. Velocities are generally in the 12-MPH range, gusting from 25 to 35 MPH.

(b) Impact

Locally experienced dry periods cause extreme dryness of untreated wood shakes and shingles on buildings and non-irrigated grass, brush, and weeds, which are often near buildings with wooden roofs. Such dryness causes these materials to rapidly ignite and burn intensely. Because of dryness, a rapidly burning grass fire or exterior building fire will quickly transfer to other buildings with dry shake or shingle roofs by means of radiation or flying brands, sparks and embers. Where there are large and/or numerous buildings with untreated shake or shingle exteriors, a small fire can rapidly grow to a magnitude beyond the control capabilities of the Fire Department, resulting in an excessive fire loss to the community.

The average rainfall is frequently surpassed by concentrated periods of heavy rainfall. This factor combined with soil types, terrain, and existing road systems, have led to landslides and flooding across both Town and private road systems. The blockage of access routes delays and/or prevents the ability of fire apparatus to respond to emergency scenes. Although the Town has identified roads traditionally susceptible to closure, clearing of these routes remains dependent upon knowledge and availability of resources. During 1997 and 1998, partial or complete road blockages were identified on Alpine Road, Wayside Road, Minoca Road, and Escobar Road.

In addition to causing fires to burn and spread rapidly, wind(s) frequently cause(s) tree limbs to break and trees to fall, which can damage electrical transmission lines. Fallen power lines not only cause power outages but, also spark fires. Local winds will continue to be a definite factor of major fire loss to buildings lacking ignition-resistant construction, fire resistive roofs and automatic sprinkler systems.

II. GEOLOGIC

(a) Conditions

The Town is located in close proximity to the San Andreas Fault and other numerous seismic faults elsewhere in the Bay Area. Buildings and other structures can experience major seismic damage, such as in the Loma Prieta earthquake in 1989. The area is replete with various soils and areas with significant movement potential.

(b) Impact

A major earthquake could result in the cutting-off of response routes of fire companies by damaged and/or blocked roads. Earthquakes of the magnitude experienced locally can cause major damage to electrical transmission facilities, break gas and water lines which, in turn, can cause power failures, start fires throughout the Town and County and impair the ability to fight them. The occurrence of multiple fires will quickly disperse existing Fire Department resources, thereby reducing and/or delaying their response to any given fire. Even minor seismic activity has an adverse impact on fire protection. Any earth movement which causes buildings to move creates cracking and warping of walls, smoke barriers, door frames, etc., thereby negating the effectiveness of building elements intended to prevent fire and smoke from spreading within the building.

Additionally, these soils are susceptible to seismic shock and moisture concentrations that may result in landslides in hilly and creek-side areas along fire department access/response routes. Such restriction of response routes can result in major fire losses in locations where buildings are covered with untreated wood shakes or shingles, particularly where these structures have no automatic fire protection systems such as sprinklers.

III. TOPOGRAPHIC

(a) Conditions

Large areas of highly combustible dry grass, weeds, brush, and trees adjacent to structures are common throughout the Town. Above ground electrical power transmission lines are suspended through trees and above large areas of dry vegetation. The hilly terrain, limited surface streets, and arrangement of man-made features around many buildings preclude, or greatly limit, any approach to all but one side.

(b) Impact

Above ground electrical transmission lines are subject to damage from overloading, winds, trees, earthquakes, and motor vehicle collisions. Fires involving large areas of dry vegetation can quickly grow to a magnitude beyond local Fire Department capabilities. The limited number of response routes and the lack of feasible alternate routes compound this problem. Additional delays must be anticipated due to attempts on the part of residents to flee or enter the fire area. Fire damage from these delays results in the need for additional suppression resources to obtain control. The combination of buildings with untreated wood shake or shingle roofs and without fire sprinkler systems and impeded access for the Fire Department can readily result in multiple building fires and major fire losses.