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)

<u>SECTION 6</u>: <u>AMEMDMENT OF CODE</u>. 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: <u>AMEMDMENT OF CODE</u>. 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: <u>AMEMDMENT OF CODE</u>. 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: <u>AMEMDMENT OF CODE</u>. 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 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 shall be constructed as all-electric 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.

- 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.
- 2. 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.
- 5. 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.

SECTION 11. <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.

INTRODUCED: October 12, 2022

PASSED:

AYES:

NOES:

ABSTENTIONS:

ABSENT:

By: _____ Craig Hughes Mayor

ATTEST:

Melissa Thurman, MMC Town Clerk

APPROVED AS TO FORM:

Cara Silver Town Attorney