RESOLUTION NO. 2022-5828

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF YORBA LINDA, CALIFORNIA, SETTING FORTH FINDINGS FOR LOCAL AMENDMENTS TO THE 2022 CALIFORNIA BUILDING CODE, THE 2022 CALIFORNIA RESIDENTIAL CODE, THE 2022 CALIFORNIA FIRE CODE, THE 2022 CALIFORNIA ELECTRIC CODE, AND THE 2022 CALIFORNIA PLUMBING CODE, RELATIVE TO LOCAL CLIMATIC, GEOGRAPHICAL AND TOPOGRAPHICAL CONDITIONS, AND REPEALING RESOLUTION NO. 2019-5642

WHEREAS, California Government code Section 50022.1 *et seq.* authorizes the City to enact any ordinance which adopts any code by reference, in whole or in part; and

WHEREAS, the State of California is mandated by Health and Safety Code Section 17922 to impose the same requirements as are contained in the most recent edition of the California Residential Code, the California Building Code, the California Plumbing Code, the California Mechanical Code, and the California Electrical Code, and the California Fire Code and the California Green Building Standards Code, (hereinafter referred to collectively as "Codes"); and

WHEREAS, Health and Safety Code Section 17958 *et seq.* provides that the City of Yorba Linda shall adopt Ordinances and regulations imposing the same or modified or changed requirements as are contained in the regulations adopted by the State pursuant to Health and Safety Code Section 17922; and

WHEREAS, Health and Safety Code Sections 17958.5 and 18941.5 permits the City to make modifications or changes to the Codes, which are reasonably necessary because of local climatic, geographical, or topographical conditions; and

WHEREAS, Health and Safety Code Section 17958.7 requires that the City Council, before making any modifications or changes pursuant to Section 17958.5 shall make an express finding that such changes or modifications or changes are reasonably necessary because of local climatic, geographical or topographical conditions; and

WHEREAS, the Building Division has recommended that modifications and changes be made to the Codes and advised that certain said changes to the California Fire Code, 2022 Edition, the California Building Code, 2022 Edition, the California Plumbing Code, 2022 Edition, the California Electrical Code, 2022 Edition, the California Residential Code, 2022 Edition, the California Mechanical Code, 2022 Edition, and the California Green Building Standards, 2022 Edition are reasonably necessary due to local conditions in the City of Yorba Linda and have further advised that the remainder of said changes and modifications are of an administrative or procedural nature, or concern themselves with subjects not covered by the Codes or are reasonable necessary to safeguard life and property within the City of Yorba Linda.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Yorba Linda as follows:

Section 1

I. Climatic Conditions

A. Hot Drying Winds. The jurisdiction of Yorba Linda is located in a semi-arid Mediterranean type climate. It annually experiences extended periods of high temperatures with little or no precipitation. Hot, dry (Santa Ana) winds, which may reach speeds of 70 M.P.H. or greater, are also common to the area. These climatic conditions cause extreme drying of vegetation and common building materials creating extreme fire hazard conditions. Frequent periods of drought and low humidity add to this fire danger. This predisposes the area to large destructive fires (conflagration). In addition to directly damaging or destroying buildings, these fires are also prone to disrupt utility services throughout the County. Obstacles generated by strong wind, such as fallen trees, street lights and utility poles, and the requirement to climb 55 feet vertically will greatly impact the response time to reach an incident scene. Additionally, there is a significant increase in the amount of wind force at 60 feet above the ground. Use of aerial type fire fighting apparatus above this height would place rescue personnel at increased risk of injury.

B. Strong Winds. The dry climatic conditions with strong winds contribute to the rapid spread of even small fires originating in high-density housing or vegetation. These fires spread very quickly and create a need for increased levels of fire protection. The added protection of fire sprinkler systems and other fire protection features will supplement normal fire department response by providing immediate protection for the building occupants and by containing and controlling the fire spread to area of origin. Fire sprinkler systems will also reduce the use of water for firefighting by as much as 50 to 75 percent.

C. Heavy Precipitation. The climate alternates between extended periods of drought and brief flooding conditions. The winter months can experience heavy rainfall of up to 6 inches per hour. Flood conditions may affect the Orange County Fire Authority's ability to respond to a fire or emergency condition. Floods also disrupt utility services to buildings and facilities within the County. Hillside erosion due to water run-off from typical to torrential rain in hillside communities must be managed. Therefore, area drains in mandated pool decks and their surrounding landscaped areas divert such run-off to the City's storm drain systems, thus reducing hillside erosion.

D. Water Availability. Water demand in this densely populated area far exceeds the quantity supplied by natural precipitation; and although the population continues to grow, the already-taxed water supply does not. California is projected to increase in population by nearly 10 million over the next quarter of a century with 50 percent of that growth centered in Southern California. Due to storage

capacities, consumption, and a limited amount of rainfall, future water allocation is not fully dependable. This necessitates the need for additional and on-site fire protection features. It would also leave tall buildings vulnerable to uncontrolled fires due to a lack of available water and an inability to pump sufficient quantities of available water to floors in a fire.

E. Semi-arid Mediterranean Climate. The warm, dry climate of Yorba Linda is conducive to private swimming pool ownership. Increased numbers of adjacent private swimming pools also increases the likelihood of children drowning where pool enclosures are not of a permanent design. Therefore, leaving a pool unprotected by the use of temporary, electromechanical, or other means of protection that can be turned off, removed or left open for untold periods of time creates an extremely dangerous situation within communities and containing large numbers of private swimming pools.

II. Topographical Conditions

A. Hillside Community. Natural slopes of 15 percent or greater generally occur throughout the foothills of Orange County. Yorba Linda has a sizeable hillside community with little to no remaining developable lowlands. Mass grading for development on hillsides has become easier and cost effective. Therefore, mass grading on hillsides has increased the amount of structures constructed on and around sloping terrain. Sloped terrain places physical burdens upon fire fighters and their equipment in responding to emergencies and attacking fires. Hillside development mandates construction to comply with setbacks from slopes and typically requires soil reports and fuel modification plans to be prepared.

B. Traffic and Circulation Congestion is an artificially created, obstructive topographical condition, which is common throughout Orange County.

C. Response Time. These topographical conditions combine to create a situation, which places fire department response time to fire occurrences at risk, and makes it necessary to provide automatic on-site fire-extinguishing systems and other protection measures to protect occupants and property.

III. Geological Conditions.

The Orange County region is a densely populated area that has buildings constructed over and near a vast and complex network of faults that are believed to be capable of producing future earthquakes similar or greater in size than the 1994 Northridge and the 1971 Sylmar earthquakes. Earthquake faults run along the northeast and southwest boundaries of Orange County. The Newport-Inglewood Fault located within Orange County was the source of the destructive 1933 Long Beach earthquake (6.3 magnitude) which took 120 lives and damaged buildings in an area from Laguna Beach to Marina Del Rey to Whittier. In December 1989, another earthquake occurred

in the jurisdiction of Irvine at an unknown fault line. Regional planning for reoccurrence of earthquakes is recommended by the State of California, Department of Conservation.

A. Earthquake Faults. Previous earthquakes have been accompanied by disruption of traffic flow and fires. A severe seismic event has the potential to negatively impact any rescue or fire suppression activities because it is likely to create obstacles similar to those indicated under the high wind section above. With the probability of strong aftershocks there exists a need to provide increased protection for anyone on upper floors of buildings. The October 17, 1989 Santa Cruz earthquake resulted in one major fire in the Marina District (San Francisco). When combined with the 34 other local fires and over 500 responses, the department was taxed to its fullest capabilities. The Marina fire was difficult to contain because mains supplying water to the district burst during the earthquake. This situation creates the need for both additional fire protection and automatic on-site fire protection for building occupants. State Department of Conservation noted in their 1988 report (Planning Scenario on a Major Earthquake on a Newport-Inglewood Fault Zone, page 59), "unfortunately, barely meeting the minimum earthquake standards of building codes places a building on the verge of being legally unsafe."

B. Landslides and Roadway Flooding. Road circulation features located throughout the County also make amendments reasonably necessary. Located throughout the County are major roadways, highways and flood control channels that create barriers and slow response times. Hills, slopes, and street and storm drain design accompanied with occasional heavy rainfall, causes roadway flooding and landslides and at times may make an emergency access route impassable. There are areas in Orange County that naturally have extended emergency response times that exceed the 5 minute goal.

C. Corrosive Soils. Soils throughout the County possess corrosive properties that reduce the expected usable life of water services when metallic pipes and concrete in contact with soils.

D. Oil Fields. Portions of the County contain active or former oil production fields. These areas contain a variety of naturally occurring gasses, liquids and vapors. These compounds present toxicity or flammability hazards to building occupants. Evaluation of these hazards and the risks they pose to development is necessary to implement appropriate mitigation.

E. Chino Hills State Park. The entire northern and eastern boundaries of Yorba Linda are adjacent to the Chino Hills State Park. The park area stretches nearly 31 miles, from the Santa Ana Mountains to the Whittier Hills. There are several different scrub and chaparral communities including coastal sage scrub, California sagebrush, California buckwheat and purple sage, as well as a mixed chaparral community that becomes fuel for fires during summer months. The winds mentioned in Paragraph I-

A above, can allow pieces of burning wood roofing material or debris behind solar panels mounted to roofs, to become flying brands that can be carried to other locations and thereby spread fire quickly. Therefore, a City wide ban of untreated wood roofing material should continue, with a minimum requirement for Class A roofing. Mandating clearance requirements for solar panels, attached to roofs, will reduce the accumulation of debris behind the panels, thus eliminating fire potential and preserving the water protective integrity of a roof covering by not impairing drainage.

F. Soil Structure. The structure of soil can either block or allow effluent waste, generated by private sewage disposal systems, to percolate into underground water supplies. The City is dependent on local water wells that are fed by underground water aquifers and the Santa Ana River. Due to health concerns related to the use of private systems in close proximity to heavily populated residential areas, the City must regulate the use of certain private sewage disposal systems. Soils routinely experienced by developers and other builders in Yorba Linda are expansive and routinely requires structures to be designed accordingly. Therefore, a blanket mandate is necessary for new construction to meet expansive soil construction requirements unless otherwise justified by a soils report.

Due to the topographical conditions of sprawling development separated by waterways and narrow and congested streets and the expected infrastructure damage inherent in seismic zone described above, it is prudent to rely on automatic fire sprinkler systems to mitigate extended fire department response time and keep fires manageable with reduced fire flow (water) requirements for a given structure. Additional fire protection is also justified to match the current resources of firefighting equipment and personnel within the Orange County fire Authority.

Section 2

The City Council hereby finds that the amendments to the Codes as set forth in detail in Ordinance Nos. 2022-1094, 2022-1095, 2022-1096, 2022-1097, 2022-1098, 2022-1099, and 2022-1100, 2022-1101, 2022-1102, 2022-1103 and 2022-1104 are reasonably necessary based on the climatic, geographical and topographical conditions cited in Section I of this Resolution and apply to the amendments as follows:

CALIFORNIA BUILDING CODE:

CODE SECTION 701A.3 710A.3.3 701A.4 903.2 903.2.8 903.3.5.3 Table 1505.1

FINDINGS

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1512.2 3109.2 3109.3 NFPA13 NFPA13D NFPA24

CALIFORNIA RESIDENTIAL CODE

CODE SECTION Table R301.2(1) R301.9 R309.6 R313.1 R313.2 R313.3.6.2.2 R319.1 R337.1.3 R337.1.7 R902.1 R902.1.2 R902.2 R908.3 R908.4 R1001.14 R1001.14.1 R1001.14.2 NFPA13 NFPA13D NFPA24

CALIFORNIA FIRE CODE

CODE SECTION 304.1.2 305.6 305.7 307 307.6 307.6.1 307.6.2 307.6.2.1 324 325 326 327 327.1 Climatic Topographical Topographical Topographical & Geological Topographical & Geological Geological

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| 327.2 | Climatic & Topographical |
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| 407.5 | |
| 501.1 | Climatic, Topographical & Geological |
| 510.1 | Climatic, Topographical & Geological |
| 903.2 | Climatic, Topographical & Geological |
| 903.2.8 | Climatic, Topographical & Geological |
| 903.3.5.3 | Climatic & Topographical |
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| 2808.14 | Climatic |
| 2808.15 | Climatic |
| 2808.16 | Climatic |
| 4903.3 | Climatic |
| 5001.5.2 | Climatic and Geological |
| 5003.1.1.1 | Climatic and Geological |
| 5801.1 | Climatic & Topographical |
| NFPA13 | Topographical & Geological |
| NFPA13D | Climatic & Topographical |
| NFPA24 | Geological |
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CALIFORNIA ELECTRICAL CODE CODE SECTION 110.5

422.10

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| CALIFORNIA PLUMBING CODE | |
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| CODE SECTION | |
| 610.8 | |
| D101.1 | |
| H1101.0 | |

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Additional amendments have been made to the California Building Code 2022 Edition, the California Residential Code, 2022 Edition, the California Electrical Code, 2022 Edition, the California Mechanical Code, 2022 Edition, the California Plumbing Code, 2022 Edition, the California Fire Code, 2022 Edition, and the California Green Building Standards, 2022 Edition. On the recommendation of the Building Division and Orange

County Fire Authority, such amendments are hereby found to be either administrative or procedural in nature or concern themselves with subjects not covered in the Codes. The changes made include provisions making each of the said Codes compatible with other Codes enforced by the City.

Section 3

The Building Division shall file copies of this Resolution and Ordinance Numbers: 2022-1094, 2022-1095, 2022-1096, 2022-1097, 2022-1098, 2022-1099, 2022-1100, 2022-1101, 2022-1102, 2022-1103 and 2022-1104 with the California Building Standards Commission as required by Health and Safety code Section 17958.7.

PASSED, APPROVED AND ADOPTED at a regular meeting of the City Council of the City of Yorba Linda on this 15th day of November 2022.

CARLOS RODRIGUEZ, MAYOR CITY OF YORBA LINDA

ATTEST:

MARCIA BROWN, CITY CLERK CITY OF YORBA LINDA

APPROVED AS TO FORM RUTAN & TUCKER LLP

CITY ATTORNEY

STATE OF CALIFORNIA)

ss. COUNTY OF ORANGE)

I, MARCIA BROWN, City Clerk of the City of Yorba Linda, California, DO HEREBY CERTIFY that the foregoing Resolution was adopted at a regular meeting of the City Council of the City of Yorba Linda held on the 15th day of November 2022, and was carried by the following roll call vote:

AYES: COUNCILMEMBERS: Campbell, Haney, Hernandez, Huang, Rodriguez NOES: COUNCILMEMBERS: None ABSENT: COUNCILMEMBERS: None

> MARCIA BROWN, CITY CLERK CITY OF YORBA LINDA