AN ORDINANCE OF THE SOUTH PLACER FIRE DISTRICT REPEALING THE 2016 CALIFORNIA FIRE CODE AND RE-ENACTING THE ADOPTION OF THE 2019 CALIFORNIA FIRE CODE

SECTION 1 PURPOSE:

The purpose of this ordinance is to repeal Ordinance No. 1- 2016/2017 in its entirety and re-enact Ordinance No. 1 2019/2020, and adopt the State of California Building Standards Code Title 24, Part 9 (2019 California Fire Code), and South Placer Fire District Fire Code Amendments to provide for the safeguarding of life and property from fire and explosion hazards and from conditions hazardous to life and property in the occupancy of buildings and premises in the South Placer Fire District.

SECTION 2 FINDINGS:

In connection with the amendments enacted by this ordinance relating to the 2019 Edition of the California Fire Code and its appendices, the South Placer Fire District Board of Directors makes the following findings pursuant to the California Health and Safety Code Sections 13869, 13869.7 and 18941.5. Such changes are reasonably necessary because of local climatic, geological and/or topographical conditions. The South Placer Fire District Board hereby adopts, pursuant to Section 18941.5 of the California Health and Safety Code, the following findings of fact:

CLIMATIC:

Climate has one of the greatest impacts to fire behavior and other major emergency events because it cannot be controlled. Average yearly rainfall for the South Placer Fire District is approximately 18 inches and typically occurs from October to April. During summer months, there is generally no measurable precipitation. Temperatures for this dry period range from 70 to 112 degrees Fahrenheit frequently accompanied by light to gusty westerly and northerly winds. The relative humidity during the summer months ranges from two (2) to thirty (30) percent, which is considered arid. The Fire District contains thousands of acres of grasslands and woodlands. The drying out of combustible and flammable wild-land fuels in the summer months allows for easy ignition.

TOPOGRAPHICAL:

The Fire District is segmented by several topographical and physical features including Folsom Lake, creeks, streams, open space, and parkways. Traffic has to be channeled around several of these topographical and physical features. These limitations create traffic congestion and delay emergency response. Preservation of wetland areas and open space increase the demands on the Fire District due to the hazards created by increased fuel loading and access limitations. Several developed elevated areas create dangerous conditions where rapid fire spread may necessitate evacuation of residents by way of the same roadways used by emergency responders.

GEOLOGICAL:

The District and surrounding Placer County are subject to ground tremors from seismic events as Placer County and the District are located within a seismically active area. Flooding has occurred in areas of the District that are adjacent to the numerous creeks and streams.

Whereas the International Code Council promulgates the International Fire Code, a nationally recognized compilation of rules and regulations. The International Code Council has conducted open code hearings that permit participation by National, State, and local code officials; as well as industry representatives, consultants, and other private parties with an interest in the International Fire Code.

Whereas the International Fire Code has been printed and published as a Code in book form within the meaning of Section 50022.1 of the Government Code of the State of California.

Whereas under this adopting ordinance, specific amendments to building standards are more restrictive than those contained within the 2018 Edition of the International Fire Code with amendments as adopted by the California Building Standards Commission and published as the 2019 Edition of the California Fire Code.

Whereas these amendments within the California Fire Code have been recognized by the South Placer Fire District to address the fire problems, concerns, and future direction by which the District can establish and maintain an environment that will afford an acceptable level of fire and life safety to all who live and work within its boundaries.

Whereas under the provisions of Section 18941.5 of the Health and Safety Code, local amendments are based on climatic, topographical and geological conditions.

Whereas the findings of fact contained herein address each of these situations and present the local situations, which, either singularly or in combination, cause the aforementioned amendments to be adopted.

Whereas it is clearly understood that the adoption of such amendments may not prevent the incidence of fire, the implementation of these various amendments to the Fire Code attempt to reduce the severity and potential loss of life, property and protection of the environment.

The Board of Directors of the South Placer Fire District ordains as follows:

SECTION 3 ADOPTION OF THE CALIFORNIA FIRE CODE WITH AMENDMENTS

SHORT TITLE:

This chapter shall be known and cited as the "2019 California Fire Code" with South Placer Fire District Amendments.

CALIFORNIA FIRE CODE-ADOPTED AND AMENDED

There is hereby adopted by the Board of Directors of the South Placer Fire District for the purpose prescribing regulations governing the safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises that certain code known as the 2019 Edition of the California Fire Code with amendments adopted by the California Building Standards Commission and published as the 2019 Edition of the California Fire Code, together with Appendices B, C, D, F, H, I and J; and all other chapters, supplements and errata save and except such portions as hereunder deleted, modified, or amended, is hereby adopted.

ENFORCEMENT

The Fire Chief of the District is designated as the Chief Fire Official of the District. The Fire Chief and his/her designated Fire Marshal shall have all the powers of peace officers in enforcing the California Fire Code; pursuant to Section 830.37 of the California Penal Code. The Fire Marshal may issue orders, notices, and citations and make arrests for violations within the South Placer Fire District; pursuant to Section 13870, 13871, 13872, 13872.5 and 13873 of the California Health and Safety Code.

DEFINITIONS:

- I) Whenever the words "Fire Code" is used in this ordinance, it shall mean the 2019 Edition of the California Fire Code adopted by the California Building Standards Commission and published as the 2019 Edition of the California Fire Code, including South Placer Fire District amendments thereto.
- 2) Wherever the word "2019 California Fire Code" is used it shall also mean State of California Building Standards Code, Title 24 of the California Code of Regulations, Part 9.
- 3) Wherever the word "2019 California Building Code" is used it shall also mean State of California Building Standards Code, Title 24 of the California Code of Regulations, Part 2.
- 4) Wherever the word "2019 California Residential Building Code" is used it shall also mean State of California Building Standards Code, Title 24 of the California Code of Regulations, Part 2.5.
- 5) Wherever the word "District" is used in the Fire Code, it shall mean the South Placer Fire District.
- 6) Wherever the words "Fire Code Official" or "Fire Chief' are used in the Fire Code, they shall mean the Fire Chief of the South Placer Fire District, or his/her designated representatives.
- 7) Wherever the words "Fire Marshal" are used in the Fire Code, they shall mean the Fire Chief of the South Placer Fire District, or his/her designated representatives.

REPEAL OF CONFLICTING ORDINANCES:

All former fire prevention ordinances or parts thereof conflicting or inconsistent with the provisions of this chapter or of the code adopted by this chapter are repealed.

AMENDMENTS, ADDITIONS, DELETIONS TO THE CALIFORNIA FIRE CODE:

Section 101.1 of the California Fire Code is hereby amended to read as follows:

101.1 Title. These regulations shall be known as the Fire Code of the South Placer Fire District, hereinafter referred to as "this code".

Section 105.1 of the California Fire Code is hereby amended to read as follows:

105.1 General. Permits shall be in accordance with Sections 105.1.1 through 105.7.25 and the South Placer Fire District Permit Fee Schedule.

Section 109.1 of the California Fire Code is hereby amended to read:

109.1 Fire appeals board established. In order to hear and decide appeals of orders, decisions or determinations made by the fire code official relative to the application and interpretation of this code, there shall be and is hereby created a fire appeals board. The fire appeals board is comprised of the Board of Directors of the South Placer Fire District. The fire code official shall be an ex-officio member of said board but shall not have a vote on any matter before the board. The board shall follow the procedures set forth in Section 2340 of the South Placer Fire District

Policy Manual, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the fire code official.

Section 109.3 of the California Fire Code is hereby deleted.

Section 110.4 of the California Fire Code is hereby amended to read as follows:

- **110.4 Violation penalties.** Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under the provisions of this code, shall be guilty of an infraction. Each infraction will be punishable by an administrative fine, in accordance with Government Code Section 36900.
- (b) Every violation determined to be an infraction is punishable by the following:
- (1) A fine of one hundred dollars (\$100) for a first violation;
- (2) A fine of two hundred dollars (\$200) for a second violation of the same ordinance within one year;
- (3) A fine of five hundred dollars (\$500) for each additional violation of the same ordinance within one year.
- (c) Notwithstanding any other provision of law, a violation of local building and safety codes determined to be an infraction is punishable by the following:
- (1) A fine not exceeding one hundred thirty dollars (\$130) for a first violation.
- (2) A fine not exceeding seven hundred dollars (\$700) for a second violation of the same ordinance within one year.
- (3) A fine not exceeding one thousand three hundred dollars (\$1,300) for each additional violation of the same ordinance within one year of the first violation.

Section 202 of the California Fire code is hereby amended to include the following revised definitions:

All-weather driving surface. A roadway designed to carry the imposed weight loads of fire apparatus with a finished surface of asphalt, concrete, road pavers, or other road sections approved by the fire code official.

Fire Control Room. A dedicated room in a sprinklered building to house fire alarm and sprinkler system equipment. See section 903.3.10.

Section 301.1 of the California Fire Code is hereby amended to read as follows:

301.1 Scope. The provisions of this chapter shall govern the occupancy and maintenance of all structures and premises for precautions against fire and the spread of fire and general requirements of fire safety.

Where provisions in this code conflict with other statutes, regulations, ordinances of Placer County, or the Town of Loomis, the most restrictive shall govern.

Section 307.1 of the California Fire Code is hereby amended to read as follows:

307.1.1 Prohibited open burning. Open burning shall be prohibited within the South Placer Fire District, except when authorized by the fire chief in accordance with the California Fire Code and regulations adopted by the County of Placer and the Town of Loomis.

Section 311.2.2 of the California Fire Code is hereby amended by deleting exceptions one and two.

Section 503.1.1 of the California Fire Code is hereby amended to include the following:

503.1.1 Buildings and Facilities. Portions of one and two family dwellings that are not within 150 feet of access roads may be increased with the installation of wet or dry standpipes illustrated in the South Placer Fire District residential notes (Appendix C).

503.1.4 Residential Driveways. For residential driveway criteria, see Appendix D of this code.

Section 503.2 of the California Fire Code is hereby amended to read as follows:

503.2 Specifications. Fire apparatus access roads shall be installed and arranged in accordance with Sections 503.2.1 through 503.2.8 and Appendix D.

Section 503.2.1 of the California Fire Code is hereby amended to read as follows:

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 15 feet (4572 mm). See Appendix D.

Section 503.2.4 of the California Fire code is hereby amended to read as follows:

503.2.4 Turning radius. The minimum inside turning radius of a fire apparatus access road shall be 30 feet. The minimum outside turning radius shall be 50 feet or greater as determined by the fire code official based on required access road width.

Section 503.2.7 of the California Fire Code is hereby amended to read as follows:

503.2.7 Grade. The gradient of a fire apparatus access road shall not exceed 10 percent. See appendix D Section D103.2.

Section 503.3 of the California Fire Code is hereby amended to read as follows:

Section 503.3 Marking. Where required by the fire code official, approved signs or other approved notices or markings that include the words NO PARKING - FIRE LANE shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. The means by which fire lanes are designated shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility. Fire lanes shall be identified as prescribed in Section 22500.1, California Vehicle Code.

Section 503.5 of the California Fire Code is hereby amended by adding the following:

503.5.3 Obstruction of gates and barricades. Gates or barricades required by Section 503.5 shall not be obstructed in any manner, including the parking of vehicles. An approved sign including the words *NO PARKING – FIRE LANE* shall be posted on the gate or barricade when required by the Chief or designated representative.

Section 503.6 of the California Fire Code is hereby amended to read as follows:

503.6 Security Gates. The installation of security gates across a fire apparatus access road shall be approved by the fire code official. They shall be installed in accordance with the requirements listed in Appendix D of this code.

Section 504 of the California Fire Code is hereby amended by adding the following:

504.5 Roof access identification. Doors leading to roof access ladders or stairs shall be labeled with signage reading "Roof Access" as required by the fire code official.

Section 505.1 of the California Fire Code is hereby amended by adding the following:

- **505.1 Address numbers.** All new and existing buildings shall place and maintain approved numbers or address identification on the buildings so as to be plainly visible and legible from the street or road fronting the property. Approved numbers or address identification shall be placed prior to occupancy on all new buildings. Said numbers shall contrast with their background and shall be visible at all hours of the day and night by way of internal or external illumination. Numbers shall be a minimum of 4 inches high with a minimum stroke width of .5 inch. External source illumination shall have an intensity of not less than 5.0 foot-candles.
- **505.1.1 Residential signage.** The address of a residence shall be posted and visible from the access roadway fronting the property. Whenever the numbers on the building will not be clearly visible from the access roadway, the numbers shall be placed at the access roadway and the driveway. Address numbers shall be clearly visible from both directions of travel on the roadway fronting the property. Said numbers shall be a minimum of 4 inches in height, with 3/8 inch stroke, reflectorized, and contrast with their background.
- **505.1.2 Buildings under construction.** Approved numbers or addresses shall be placed at each fire access road entry into and on each building within construction sites.
- **505.1.3 Multiple tenant buildings.** Tenant spaces within new or existing multi-tenanted buildings shall have approved numbers or addresses displayed at secondary access doors into the tenant space as required by the fire code official.

Section 507.5.1.1 of the California Fire Code is hereby amended to read as follows:

507.5.1.1 Hydrant for standpipe systems. Buildings equipped with a standpipe system installed in accordance with Section 905 shall have a fire hydrant within 40 feet (12192 mm) of the fire department connection.

Exception: The distance shall be permitted to exceed 40 feet (12192 mm) where approved by the fire code official.

Section 901.4.3 of the California Fire Code is hereby eliminated in its entirety.

Section 903.1 of the California Fire Code is hereby amended by adding the following thereto:

903.1.2 Fire Area. For purposes of this section, FIRE AREA is defined as the aggregate floor area bounded by exterior walls as measured from the interior wall surface of the exterior walls.

903.1.3 Fire Barriers. The existence of firewalls, fire barriers, or fire-resistance-rated horizontal assemblies shall not eliminate any requirement for an automatic sprinkler system.

Section 903.2 of the California Fire Code is hereby amended to read as follows:

903.2 Where Required. Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in Sections 903.2.1 through 903.2.20 and as follows:

- 1. For all new buildings and structures, except Group R-3 and U occupancies, when the total fire area is 3600 square feet or greater.
- 2. All R-3 occupancies shall be provided with an approved automatic sprinkler system in accordance with Section 903.2.8 of this code and the California Residential Code.
- 3. Automatic sprinkler protection shall be provided in all accessible combustible and non-combustible attic spaces, sub-floors, or areas above ceilings, which are greater than six inches in height, in a fire sprinklered structure.
- 4. For new buildings having no designated use or tenant, the minimum sprinkler design shall be Ordinary Hazard Group 2 or as prescribed by the fire code official.

Section 903.2.18 of the California Fire Code is hereby amended by adding the following:

903.2.18.1 Garage sprinklers. Sprinkler heads in garages shall be spaced at no more than 150 sq. ft. per sprinkler and shall be intermediate temperature rated.

903.2.18.2 Detached Garages. Automatic sprinkler protection shall be provided in detached garages under the following circumstances:

- 1. An exterior wall of the garage is closer than six (6) feet from an exterior wall of an adjacent sprinklered Group R occupancy.
- 2. A roof projection of the garage is closer than four (4) feet from a roof projection of an adjacent sprinklered Group R occupancy.

Section 903.3.1.2 of the California Fire Code is hereby deleted in its entirety amended to read as follows:

903.3.1.2 NFPA 13R sprinkler systems. Where in the code a NFPA 13R sprinkler system is allowed, a NFPA 13 sprinkler system shall be used.

Section 903.3.9 of the California Fire Code is hereby amended to read as follows:

903.3.9 Floor control valves. Floor control valves and water-flow detection assemblies shall be installed at each floor where any of the following occur:

- 1. Buildings where the floor level of the highest story is located more than 30 feet (9144 mm) above the lowest level of fire department vehicle access.
- 2. Buildings that are three or more stories in height.

3. Buildings that are two or more stories below the highest level of fire department vehicle access.

Exception: For Group R-3 and R-3.1 occupancies, floor control valves and water-flow detection assemblies shall not be required.

Section 903 of the California Fire Code is hereby amended by adding the following:

903.3.10 Fire control room. An approved fire control room shall be provided for buildings protected by an automatic sprinkler system. The room shall contain all sprinkler system risers, fire alarm control panels, and other fire equipment required by the chief. Fire control rooms shall be located within the building on an outside wall at a location approved by the chief and shall be provided with a means to access the room directly from the exterior with an approved door of minimum dimensions of 36" X 80". Durable signage reading "FIRE CONTROL ROOM" with letters not less than three inches in height shall be affixed to the exterior of the door. A key box complying with section 506 shall be installed adjacent to the door.

Exception: Fire Control Room is not required for one/two family dwellings.

903.3.10.1 Dimensions. Fire control rooms shall have a minimum dimension of five feet and shall be not less than 35 square feet in usable area. The fire sprinkler riser shall be located between 12 inches and 18 inches from the exterior wall and at least 12 inches from any other wall. The fire control room may contain other building service equipment. No other storage will be permitted.

Section 903.4.2 of the California Fire Code is hereby amended to read as follows:

903.4.2 Alarms. One exterior approved audible alarm and visual strobe device, located on the exterior of the building in an approved location, shall be connected to each automatic sprinkler system. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system. Visible alarm notification appliances shall not be required except when required by Section 907. A single approved audible/visual device shall be provided in the interior of the building in a normally occupied location.

Section 903.4.2 is amended by adding the following thereto:

903.4.2.1 Alarms in Group R3 Occupancies. Automatic sprinkler systems in R-3 occupancies shall be equipped with a water flow switch, an exterior horn-strobe located on the address side of the structure, and interconnection to the smoke detector alarm circuit.

Section 903.6 of the California Fire Code is amended to read as follows:

903.6 Where required in existing buildings and structures. An automatic sprinkler system shall be provided in existing buildings and structures where required in Chapter 11. In addition, except for Group U and R-3 occupancies, when the area of an existing building is increased to 3600 square feet or more, the addition and existing building shall be provided with an approved automatic fire sprinkler system throughout.

903.6.1 Existing R-3 Occupancies. An automatic sprinkler system shall be provided throughout an existing R-3 occupancy wherein the addition of new fire area exceeds fifty percent of the existing fire area of the original structure.

Section 905.3.1 of the California Fire Code is hereby amended to read as follows:

905.3.1 Height. In other than Group R-3 and R3.1 occupancies, Class III standpipe systems shall be installed throughout at each floor where any of the following occur:

- 1. Buildings where the floor level of the highest story is located more than 30 feet (9144 mm) above the lowest level of fire department vehicle access.
- 2. Buildings that are three or more stories in height.
- 3. Buildings where the floor level of the lowest story is located more than 30 feet (9144 mm) below the highest level of fire department vehicle access.
- 4. Buildings that are two or more stories below the highest level of fire department vehicle access.

Exceptions:

- 1. Class I standpipes are allowed in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1
- 2. Class I manual standpipes are allowed in open parking garages where the highest floor is located not more than 150 feet (45720 mm) above the lowest level of fire department vehicle access.
- 3. Class I manual dry standpipes are allowed in open parking garages that are subject to freezing temperatures, provided that the hose connections are located as required for Class II standpipes in accordance with Section 905.5.
- 4. Class I standpipes are allowed in basements equipped throughout with an automatic sprinkler system.
- 5. In determining the lowest level of fire department vehicle access, it shall not be required to consider either of the following:
 - 5.1. Recessed loading docks for four vehicles or less, and
 - 5.2. Conditions where topography makes access from the fire department vehicle to the building impractical or impossible.

Section 907.2 of the California Fire Code is hereby amended by adding the following:

907.2 Where required – new buildings and structures. An approved fire alarm system installed in accordance with the provisions of this code and NFPA 72 shall be provided in new buildings and structures in accordance with Sections 907.2.1 through 907.2.23 and provide occupant notification in accordance with Section 907.5, unless other requirements are provided by another section of this code.

Except for Group R and Group U occupancies, all new unsprinklered buildings shall have an approved automatic fire alarm system installed when the total fire area is equal to or greater than 1500 square feet. In addition, Group

A, E, and M occupancies in buildings of any square footage, sprinklered or unsprinklered, shall be provided with an approved automatic fire alarm system.

Not fewer than one manual fire alarm box shall be provided in an approved location to initiate a fire alarm signal for fire alarm systems employing automatic fire detectors or water-flow detection devices. Where other sections of this code allow elimination of fire alarm boxes due to sprinklers *or automatic fire alarm systems*, a single fire alarm box shall be installed *at a location approved by the fire code official*.

Exception: The manual fire alarm box is not required to be installed when approved by the fire code official.

Section 907.6.6 of the California Fire Code is hereby amended to read as follows:

907.6.6 Monitoring. Fire alarm systems required by this chapter or by the California Building Code, shall be monitored by an approved Central Station Protective Signaling Service (UUFX) that is listed in the current edition of the UL Online Certifications Directory, and in accordance with NFPA 72, unless otherwise required by the California Fire Code.

Exception: Monitoring by a Central Station is not required for:

- 1. Single and multiple station smoke alarms required by Section 907.2.10.
- 2. Smoke detectors in group I-3 occupancies shall be monitored in accordance with Section 907.2.6.3.
- 3. Automatic sprinkler systems in one and two-family dwellings.

Section 912 of the California Fire Code is hereby amended by adding the following thereto:

507.5.1.1 Hydrant for sprinkler systems. Buildings equipped with a sprinkler system installed in accordance with Section 903 shall have a fire hydrant within 40 feet (12192 mm) of the fire department connection.

Exception: The distance shall be permitted to exceed 40 feet (12192 mm) where approved by the fire code official.

Section 5704.2.9.6.1 of the California Fire Code is amended to read as follows:

5704.2.9.6.1 Locations where above-ground tanks are prohibited. Storage of Class I and II liquids in above-ground tanks outside of buildings is prohibited in all zoning districts except districts zoned for commercial, industrial, or permitted agricultural uses.

Exception: UL 2085 listed protected above-ground tanks to support emergency power generator installations in areas zoned commercial, industrial, agricultural, rural, or rural residential, and for facilities on an individual basis consistent with the intent of this provision. Tank size shall not exceed 500 gallons (1892.706 L) for Class I or II liquids or 1000 gallons (3785.412 L) for Class III liquids.

Section 5706.2.4.4 of the California Fire Code is amended to read as follows

5706.2.4.4 Locations where above-ground tanks are prohibited. The storage of Class I and II liquids in above-ground tanks is prohibited in all zoning districts except districts zoned for commercial, industrial, or permitted agricultural uses.

Section 5806.2 of the California Fire Code is amended to read as follows:

5806.2 Limitations. Storage of flammable cryogenic fluids in stationary containers outside of buildings is prohibited in any area that is zoned for other than industrial use.

Exception: Liquid hydrogen engine fueling systems in compliance with Section 5806 and NFPA Standard 2, Hydrogen Technologies Code.

Section 6104.2 of the California Fire Code is hereby amended by adding the following thereto:

6104.2.1 LP-Gas storage prohibited. The storage of liquefied petroleum gas is prohibited in any central business district and in all zoning districts except districts zoned for commercial, industrial, rural, or permitted agricultural uses.

Appendix B, Tables B105.1 (1) and B105.2: Tables B105.1 (1) and B105.2 of Appendix B are hereby deleted.

Appendix B, Section B105.1 of the California Fire Code, is hereby amended to read as follows:

B105.1 One- and two-family dwellings, Group R-3 and R-4 buildings and townhouses The minimum fire-flow and flow duration requirements for one- and two-family dwellings, Group R-3 and R-4 buildings and townhouses shall be 1500 gallons per minute for one hour. Fire-flow and flow duration for dwellings having a fire-flow calculation area in excess of 3600 square feet (344.5 sq. m.) shall not be less than that specified in Table B105.1(2).

Exception: A reduction in required fire flow of up to 50 percent, as approved by the fire chief, is allowed when the building is provided with an approved automatic fire sprinkler system.

Appendix B, Section B105.2 of the California Fire Code, is hereby amended to read as follows:

B105.2 Buildings other than one- and two-family dwellings, Group R-3 and R-4 buildings and townhouses. The minimum fire-flow and flow duration requirements for buildings other than one- and two-family dwellings, Group R-3 and R-4 buildings and townhouses shall be as specified in Table B105.1 (2).

Exception: A reduction in required fire flow of 50 percent, as approved by the fire chief, is allowed when the building is provided with an approved automatic fire sprinkler system installed in accordance with Section 903.3.1.1. The resulting fire-flow shall not be less than 1500 gallons per minute (5678 L/min) for the prescribed duration as specified in Table B105.1 (2).

Exception: [SFM] Group B, S-2, and U occupancies having a floor area not exceeding 1,000 square feet, primarily constructed of non-combustible exterior walls with wood or steel roof framing, having a Class A roof assembly, with uses limited to the following or similar uses.

- 1. California State Parks buildings of an accessory nature (restrooms).
- 2. Safety roadside rest areas, (SRRA), public restrooms.

- 3. Truck inspection facilities, (TIF), CHP office space and vehicle inspection bays.
- 4. Sand/salt storage buildings, storage of sand and salt.

Appendix C, Fire Hydrant Locations and Distribution. Replace Table C102.1 with the following table:

TABLE C102.1

NUMBER AND DISTRIBUTION OF FIRE HYDRANTS

FIRE-FLOW REQUIREMENT (GPM)	MINIMUM NO. OF HYDRANTS	AVERAGE SPACING BETWEEN HYDRANTS ¹²³⁴	MAX. DISTANCE FROM ANY POINT ON FRONTAGE TO A HYDRANT ⁵
0-1000	1	300	250
1000-1750	2	300	250
2000-2250	2	300	225
2500	3	300	225
3000	3	300	225
3500-4000	4	300	210
4500-5000	5	300	180
5500	6	300	180
6000	6	250	150
6500-7000	7	250	150
7500 or more	8 or more ⁶	200	120

¹ Reduce by 100 feet for dead-end streets or roads.

² Where streets are provided with median dividers that cannot be crossed by fire fighters pulling hose lines, or arterial streets are provided with four or more traffic lanes and have a traffic count of more than 30,000 vehicles per day, hydrant spacing shall average 500 feet on each side of the street and be arranged on an alternating basis up to a fire flow requirement of 7000 gallons per minute and 400 feet for higher fire flow requirements.

³Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants shall be provided at not less than 1000 foot spacing to provide for transportation hazards.

⁴ Spacing may be increased to 500 feet for single family dwelling residential sub-divisions.

⁵ Reduce by 50 feet for dead end streets or roads.

⁶ One hydrant for each 1000 gallons per minute or fraction thereof.

⁷ The fire code official is authorized to modify the location, number and distribution of fire hydrants based on the site-specific constraints and hazards.

Appendix D, Section D102, is hereby amended to read as follows:

D102.1 Access and loading. Facilities, buildings or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an approved fire apparatus access road with an asphalt, concrete, or other all-weather driving surface capable of supporting the imposed loads of fire apparatus weighing at least 75,000 pounds.

Appendix D, Section D103.1 is hereby amended to read as follows:

D103.1 Access road width. The minimum width of a fire department access road shall be 26 feet (7925 mm). The width of a fire department access road is measured from bottom face of curb to bottom face of curb on streets with curbs and gutters and from flow line to flow line on streets with rolled curbs. Flow line is the lowest continuous elevation on a rolled street curb. Where no curb exists, road width shall be measured from the edge of pavement to the edge of pavement.

Exception: For driveways and access roads associated with Group R-3 occupancies, see section D103.7.

Appendix D, Section D103.2 is hereby amended to read as follows:

D103.2 Grade. Fire Apparatus access roads shall not exceed 10 percent in grade.

Exception: Grades steeper than 10 percent shall be approved by the Fire Chief when the road is surfaced with concrete or an equivalent surface.

In order to accommodate grades in excess of sixteen (16.0) percent; up to a maximum of twenty (20.0) percent, the access road shall be designed and certified by a registered engineer and approved by the chief.

Appendix D, Section D103.3 is hereby amended to read as follows:

D103.3 Turning radius. The inside turning radius for a fire apparatus access road shall be 30 feet or greater. The outside turning radius shall be 50 feet or greater.

Appendix, D, Section D103.4 is hereby amended to read as follows:

D103.4 Dead Ends. Dead-end fire apparatus roads in excess of 150 feet (45720mm) shall be provided with an approved turnaround.

The maximum length of a dead-end road shall not exceed cumulative lengths, regardless of the number of parcels served.

- Parcels proposed less than 1 acre 800 feet.
- Parcels proposed 1 acre to 4.99 acres 1320 feet.
- Parcels proposed 5 acres to 19.99 acres 2640 feet.
- Parcels proposed 20 acres or larger 5280 feet

Each dead-end road shall have a turnaround constructed at its terminus

Appendix D, Table D103.4 is hereby removed in its entirety.

Appendix D, Section D103.5 is hereby removed in its entirety and replaced as follows:

D103.5 Fire Apparatus access road gates. Gates securing the fire apparatus access roads shall comply with all of the following criteria:

- 1. Gates shall be of the swinging or sliding type.
- 2. Construction of gates shall be of materials that allow manual operation by one person.
- 3. Gate entrances shall be at least two feet wider than the width of the traffic lane serving the gate.
- 4. Gates shall be accessible to the fire district by approved KNOX key switch and OPTICOM strobe receiver. Gates shall be programmed to allow a minimum of 15 minutes of open access time when activated by the strobe entry device.
- 5. An approved hammerhead, turn-around bulb or other means of turn-around shall be provided on the entry side of the gate.
- 6. Gates shall open automatically from the interior without use of a special code or device. Magnetic strip or pressure pad assemblies are acceptable.
- 7. All Gates providing access from a road to a driveway or private road shall be located at least 30 feet from the roadway and open to allow a vehicle to stop without obstructing traffic on that road.
- 8. Gates shall be provided with an emergency power source that will open the gates in the event of a power failure. During a power emergency, gates shall automatically open and remain open during the period when the primary power source is not available.
- 9. Provide a separate personnel gate or opening sized and surfaced to allow for pedestrian and accessibility access.
- 10. Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.
- 11. Automatic gates shall be designed, constructed, and installed to comply with the requirements of ASTM F2200. Electric gate operators shall be listed in accordance with UL 325.

Appendix D, Section D103.5.1 is hereby added as follows:

D103.5.1 Residential driveway gated entrance. Residential driveway gates shall be provided with a KNOX padlock, key switch, or key box as approved by the chief. Provision shall be made to ensure that access can be gained during a power failure.

Appendix D, Section D103.6 is hereby removed in its entirety and replaced as follows:

D103.6 Signs. Fire apparatus access roads shall be posted as "no parking" areas in accordance with Section 22500.1 of the California Vehicle Code.

Appendix D, Sections D103.6.1 and D103.6.2 are hereby deleted in their entirety.

Appendix D, Section D103 of the California Fire Code is hereby amended by adding the following thereto:

D103.7 Residential roadways/driveways. Driveways for access to one and two family dwellings, shall conform to the following criteria as applicable:

- 1. Driveways serving one parcel with no more than five structures shall be a minimum of twelve (12) feet in width. The chief may require up to a twenty (20) foot wide driveway when more than five structures exist.
- 2. Roadways serving more than one parcel, but less than five parcels, shall be a minimum twenty (20) feet in width. Roadways serving five parcels or more shall be no less than 24 feet in width.
- 3. Vertical clearance shall be a minimum of fifteen (15) feet.
- 4. When the driveway exceeds 150 feet in length, provide a turnout at the midpoint. For driveways not exceeding 400 feet in length, the turnout may be omitted if full sight distance is maintained. If the driveway exceeds 800 feet in length, turnouts shall be no more than 400 feet apart.
- 5. When a driveway exceeds 300 feet in length, a turnaround shall be provided no greater than 50 feet from the structure.
- 6. The driveway must be provided with an all-weather surface capable of supporting a 75,000 lb. vehicle loading. When the road grade exceeds ten (10) percent, the road shall be surfaced with asphalt or concrete. See section D103.2.

D103.8 Parking. When provisions for parallel parking are included in the width of a street or roadway, a minimum eight (8) foot width shall be allocated for the parking space.

Appendix D, Section D104.2 of the California Fire Code is hereby amended to read as follows:

D104.2 Buildings exceeding 62,000 square feet in area. Buildings or facilities having a gross building area of more than 62,000 square feet (5760 sq. meters) shall be provided with two separate and approved fire apparatus access roads.

Exception: The chief may allow projects having a gross building area of up to 124,000 square feet (11,520 sq. meters) to have a single approved fire apparatus access road when all buildings are equipped throughout with approved automatic sprinkler systems.

Appendix D, Section D105.2 of the California Fire Code is hereby amended to read as follows:

D105.2 Width. Aerial fire apparatus access roads shall have a minimum unobstructed width of 28 feet (8534 mm) in the immediate vicinity of the building or portion thereof.

Appendix D, Section D106.1 of the California Fire Code is hereby amended to delete the exception and read as follows:

D106.1 Projects having more than 100 dwelling units. Multiple-family residential projects having more than 100 dwelling units shall be provided with two separate and approved fire apparatus access roads.

Exception: Projects with more than 100 dwelling units as approved by the fire code official, may have a single approved fire apparatus access road when all buildings are equipped throughout with approved automatic sprinkler systems.

Appendix D, Section D107.1 of the California Fire Code is hereby amended to delete the exceptions and read as follows:

D107.1 One or two-family dwelling residential developments. Developments of one- or two-family dwellings where the number of dwelling units exceeds 30 shall be provided with two separate and approved fire apparatus access roads.

Chapter 9 – Section 903.3.1.3 – NFPA 13D Sprinkler Systems, is hereby amended by adding the following to read:

903.3.1.3.2 <u>Automatic sprinkler systems installed within the San Juan Water District jurisdiction, after January 1, 2017, in one and two family dwellings; Group R-3; and townhomes shall be designed using an approved Modified Passive Purge System design.</u>

Exception: When an automatic fire sprinkler system is installed with an approved backflow assembly valve to protect the public water supply source.

Chapter 80, Referenced Standards—NFPA 13D, is hereby amended by adding the following to read:

Sprinkler System Definition

3.3.11.5.1 Modified Passive Purge System. A type of sprinkler system that serves all toilets in addition to the fire sprinklers.

Aboveground Pipe

- **5.2.2.3** Nonmetallic pipe used in multipurpose piping systems, <u>modified passive purge systems</u> and passive purge systems not equipped with a fire department connection shall be designed to withstand a working pressure of not less than 130 psi (9 bar) at 120°F (49°C).
- **5.2.5.3** Nonmetallic fittings used in multipurpose piping systems, <u>modified passive purge systems</u> and passive purge systems not equipped with a fire department connection shall be designed to withstand a working pressure of not less than 130 psi (9 bar) at 120°F (49°C).

Water Supply

- **6.6** Modified Passive Purge
- **6.6.1** A modified passive purge system shall be installed in accordance with 6.6.2 through 6.6.5
- 6.6.2 Where a modified passive purge system is required by the AHJ, it shall be designed, subject to the approval of the local water purveyor, to the following maximum water supply source criteria at the public water service main supply point.
 - (1) Static Supply Pressure of 45 PSIG
 - (2) Residual Supply Pressure of 20 PSIG
 - (3) Available max daily demand flow of 1,000 GPM

Exception: Residential home systems serving an occupied area greater than 3,500 square feet may be designed using an approved public water supply system design criterion acceptable to the AHJ.

- 6.6.3 The hydraulic design calculations for the fire sprinkler system shall incorporate a 10% safety margin unless otherwise approved by the AHJ.
- 6.6.4 The piping configuration shall be designed to circulate water throughout and between each floor level by looping the piping system and maintaining minimum dead-end arm-over branch lines with a maximum length of 3 feet.
 - **Exception:** dead-end branch lines which terminate to a toilet that facilitates water circulation.
- 6.6.5 The piping configuration shall provide a ½ inch outlet connected to all water closets within the home to facilitate water circulation.

Installation

7.6 Alarms. Local water-flow alarms shall be provided on all sprinkler systems in homes. The local water-flow alarm shall sound between 30 and 90 seconds of water flowing in the system.

SECTION 4 SCOPE:

Except as set forth in this ordinance, all other provisions of California Fire Code remain in full force and effect.

SECTION 5 INTERNATIONAL FIRE CODE ADOPTED BY REFERENCE

The 2018 International Fire Code, including appendices A, B, E, F, G, and K, published by the International Code Council, is hereby adopted by reference.

SECTION 6 SEVERABILITY:

If any section, subsection, clause, phrase, or portion of this ordinance is for any reason held to be invalid or unconstitutional by the decision of any court or competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance. The South Placer Fire District Fire Board hereby declares that it would have adopted this ordinance and each section, subsection, sentence, clause, phrase or portion thereof, irrespective of the fact that any one or more sections, subsections, clauses, phrases or portions be declared invalid or unconstitutional.

SECTION 7 EFFECTIVE DATE:

	-	1, 2020 provided it is published in full or in of general circulation in the South Placer Fi	-
Fire Board on		thereof read at the regular meeting of the S cond reading occurred at the regular meeting	
	d adopted by the South Placer	seconded by Director Fire District, Fire Board, State of California	
AYES:	Director(s):		
NOES:	Director(s):		
ABSTAIN:	Director(s):		
ABSENT:	Director(s):		
		Chris Gibson DC, Fire Board President	

Kathy Medeiros, Board Secretary

ATTEST: