Title 14 of the California Code of Regulations (14 CCR),
Division 1.5, Chapter 7
Subchapter 2, Articles 1-5
“DRAFT State Minimum Fire Safe Regulations, 2021”

Subchapter 2. State Minimum Fire Safe Regulations

Article 1. Administration

§ 1270.00. Title.
These regulations shall be known as the “State Minimum Fire Safe Regulations,” and shall constitute the minimum Wildfire protection standards of the California Board of Forestry and Fire Protection.

§ 1270.01. Definitions The following definitions are applicable to this Subchapter.
(a) Access: The Roads on a route from a Building to the nearest Collector Road.
(b) Agriculture: Land used for agricultural purposes as defined in a Local Jurisdiction’s zoning ordinances.
(c) Board: California Board of Forestry and Fire Protection.
(d) Building: Any Structure used or intended for supporting or sheltering any use or Occupancy, except those classified as Utility and Miscellaneous Group U.
(e) CAL FIRE: California Department of Forestry and Fire Protection.
(f) Clear Width: A horizontal area free of vegetation, debris, fences, or other materials that may impede traffic flow; this area may include flexible posts or barriers.
(g) Collector Road: Roads identified by a Local Jurisdiction as a major or minor, or general, collector road pursuant to Title 23, Code of Federal Regulations, § 470.105 and in conformance with the procedures in the US Federal Highway Administration

(h) Dead-end Road: A Road that has only one point of vehicular ingress/egress, including cul-de-sacs and looped Roads.

(i) Defensible Space: As defined in California Code of Regulations, Title 14, § 1299.02(a).

(j) Development: As defined in section 66418.1 of the California Government Code.

(k) Director: Director of the Department of Forestry and Fire Protection or their designee.

(l) Driveway: A vehicular pathway that serves up to two (2) parcels with no more than two (2) Residential Units and any number of non-commercial or non-industrial Utility or Miscellaneous Group U Buildings on each parcel. A Driveway shall not serve commercial or industrial uses at any size or scale.

(m) Exception: An alternative means or method to achieve a specified standard requested by the applicant subject to § 1270.06 (Exceptions to Standards).

(n) Existing Road: A physical Road constructed and used by vehicles prior to a Development proposal.

(o) Fire Apparatus: A vehicle designed to be used under emergency conditions to transport personnel and equipment or to support emergency response, including but not limited to the suppression of fires.

(p) Fire Authority: A fire department, agency, division, district, or other governmental body responsible for regulating and/or enforcing minimum fire safety standards.

(q) Fire Hydrant: A valved connection on a water supply or storage system for the purpose of providing water for fire protection and suppression operations.

(r) Fuel Break: A strategically located area where the volume and arrangement of vegetation has been managed to limit fire intensity, fire severity, rate of spread, crown fire potential, and/or ember production.

(s) Greenbelts: Agricultural lands, open space, parks, wildlands, or a combination thereof, as designated by Local Jurisdictions, which surround or are adjacent to a city or
urbanized area, and restrict or prohibit Development.

(t) Greenways: Linear open spaces or corridors that link parks and neighborhoods within a community through natural or manmade trails and paths.

(u) Hammerhead/T: A Road or Driveway that provides a “T” shaped, three-point Turnaround space for Fire Apparatus, being no narrower than the Road or Driveway that serves it.

(v) Hazardous Land Use: A land use that presents a significantly elevated potential for the ignition, prolonged duration, or increased intensity of a Wildfire due to the presence of flammable materials, liquids, or gasses, or other features that initiate or sustain combustion. Such uses are determined by the Local Jurisdiction and may include, but are not limited to, power-generation and distribution facilities; wood processing or storage sites; flammable gas or liquids processing or storage sites; or shooting ranges.

(w) Local Jurisdiction: Any county, city/county agency or department, or any locally authorized district that approves or has the authority to regulate Development.

(x) Local Responsibility Area (LRA): Those areas of land not classified by the Board where the financial responsibility of preventing and suppressing Wildfires is that of the state or federal government, pursuant to Public Resources Code (PRC) section 4125.


(z) Municipal-Type Water System: A system having water pipes servicing Fire Hydrants and designed to furnish, over and above domestic consumption, a minimum of 250 gpm (950 L/min) at 20 psi (138 kPa) residual pressure for a two (2) hour duration.

(aa) New Road: A theoretical Road proposed in a Development application.

(bb) Occupancy: The purpose for which a Building, or part thereof, is used or intended to be used.

(cc) One-way Road: A minimum of one Traffic Lane width designed for traffic flow
in one direction only.

(dd) Perimeter: The boundary of an individual parcel and/or the boundary of a tentative and final or parcel map, pursuant to Government Code § 66411, within which lies any Building construction.

(ee) Residential Unit: Any Building or portion thereof which contains living facilities, including provisions for sleeping, eating, cooking and/or sanitation for one or more persons. Manufactured homes, mobile homes, and factory-built housing are considered residential units, unless being sited or installed as an accessory or junior accessory dwelling unit in accordance with § 1270.03(d) (Scope – Exemptions – ADUs).

(ff) Ridgeline: The line of intersection of two opposing slope aspects running parallel to the long axis of the highest elevation of land.

(gg) Road: A public or private vehicular pathway to more than two (2) parcels, more than four (4) Residential Units, or to any industrial or commercial Occupancy.

(hh) Road or Driveway Structures: Bridges, culverts, and other appurtenant structures which supplement the Traffic Lane or Shoulders.

(ii) Shoulder: A vehicular pathway adjacent to the Traffic Lane.

(jj) State Responsibility Area (SRA): As defined in Public Resources Code sections 4126-4127; and the California Code of Regulations, title 14, division 1.5, chapter 7, article 1, sections 1220-1220.5.

(kk) Structure: That which is built or constructed, a Building of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner.

(ll) Substantial Compliance: Nearly complete satisfaction of all material requirements consistent with the purpose of the applicable State Minimum Fire Safe Regulations even though the formal requirements are not satisfied.

(mm) Substantial Evidence: Enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, in light of the whole record of evidence, even though other conclusions might also be reached. Argument, speculation, unsubstantiated opinion or narrative, or evidence which is clearly erroneous or inaccurate does not constitute substantial evidence. Substantial evidence shall include facts, reasonable assumptions predicated
upon facts, and expert opinion supported by facts.

   (nn) Traffic Lane: The portion of a Road or Driveway that provides a single line of vehicle travel.

   (oo) Turnaround: A portion of a Road or Driveway, unobstructed by parking, which allows for a safe opposite change of direction for Fire Apparatus. Design of such area may be a hammerhead/T or terminus bulb.

   (pp) Turnout: A widening in a Road or Driveway to allow vehicles to pass.

   (qq) Undeveloped Ridgeline: A Ridgeline with no Buildings.

   (rr) Utility and Miscellaneous Group U: A Structure of an accessory character or a miscellaneous Structure not classified in any specific Occupancy permitted, constructed, equipped, and maintained to conform to the requirements of Title 24, California Building Standards Code.

   (ss) Vertical Clearance: The minimum specified height of a bridge, overhead projection, or vegetation clearance above the Road or Driveway.

   (tt) Very High Fire Hazard Severity Zone (VHFHSZ): As defined in Government Code section 51177(i).

   (uu) Wildfire: As defined in Public Resources Code Section 4103 and 4104.


§ 1270.02. Purpose.

   (a) These regulations have been prepared and adopted for the purpose of establishing state minimum Wildfire protection standards in conjunction with Building construction and Development in the State Responsibility Area (SRA) and, after July 1, 2021, the Very High Fire Hazard Severity Zones, as defined in Government Code § 51177(i) (VHFHSZ).

   (b) Building construction in the SRA and, after July 1, 2021, the VHFHSZ shall provide for minimum Wildfire protection standards as specified in the following articles.

   (c) These standards shall provide for emergency ingress and egress; signing and Building numbering; private water supply reserves for emergency fire use; vegetation modification, Fuel Breaks, Greenbelts, and measures to preserve Undeveloped
Ridgelines. The regulations which follow shall specify the minimums for such standards.

(d) By limiting Building construction in those areas where these minimum Wildfire protection standards are not satisfied, this reduces the risk of Wildfires in these areas, which among other things protects the health, safety and welfare of residents, and protects natural resources and the environment.


§ 1270.03. Scope.

(a) These regulations shall apply to:

(1) the Perimeters and Access to all residential, commercial, and industrial Building construction within the SRA approved after January 1, 1991 and those approved after July 1, 2021 within the VHFHSZ, except as set forth below in subsections (b), (c), (d), and (e) below.

(2) the siting of newly installed commercial modulars, manufactured homes, mobilehomes, and factory-built housing, as defined in Health and Safety Code sections 18001.8, 18007, 18008, and 19971, except where being sited or installed as an accessory or junior accessory dwelling unit as set forth in subsection (d) below;

(3) all tentative and parcel maps or other Developments approved after January 1, 1991; and

(4) applications for Building permits on a parcel approved in a pre-1991 parcel or tentative map to the extent that conditions relating to the Perimeters and Access to the Buildings were not imposed as part of the approval of the parcel or tentative map.

(b) These regulations do not apply where an application for a Building permit in the SRA is filed after January 1, 1991 for Building construction on a parcel that was formed from a parcel map or tentative map (if the final map for the tentative map is approved within the time prescribed by the local ordinance) approved prior to January 1, 1991, to the extent that conditions relating to the Perimeters and Access to the Buildings were imposed by the parcel map or final tentative map approved prior to January 1, 1991.
(1) For this exemption to apply, the parcel map or tentative map that was approved prior to January 1, 1991, shall have imposed conditions relating to the Perimeters and Access to the Building construction that is the subject of the Building permit application filed after January 1, 1991.

(2) These regulations shall apply to the Building construction to the extent that conditions relating to the Perimeters and Access to the Buildings were not imposed as part of the approval of the parcel map or tentative map.

(c) At the discretion of the Local Jurisdiction, and subject to any requirements imposed by the Local Jurisdiction to ensure reasonable ingress, egress, and capacity for evacuation and emergency response during a Wildfire, these regulations shall not apply to the reconstruction or repair of a Building due to a Wildfire, subject to the following:

   (1) this exemption shall not apply if the reconstruction or repair encroaches on the minimum setback requirements in § 1276.01 Building and Parcel Siting and Setbacks;

   (2) this exemption shall not apply if the reconstruction or repair changes the use of the Building or Buildings that had existed previously;

   (3) nothing in this subsection shall be construed to alter the extent to which these regulations apply to the reconstruction or repair of a Building for reasons unrelated to a Wildfire; and

   (4) nothing in this subsection shall be construed to alter the legal character of a Building reconstructed or repaired pursuant to this exemption.

(d) These regulations do not apply to the creation of accessory or junior accessory dwelling units that comply with Government Code sections 65852.2 or 65852.22, or any local ordinances enacted thereunder, as applicable, including any local ordinances requiring provisions for fire and life safety.

(e) These regulations shall not apply to Roads used solely for Agriculture, mining, or the management of timberland and harvesting of forest products.

§ 1270.04. Local Regulations.

(a) These regulations shall serve as the minimum Wildfire protection standards applied in SRA and VHFHSZ. However, these regulations do not supersede local regulations which equal or exceed the standards of this Subchapter.

(b) A local regulation equals or exceeds a minimum standard of this Subchapter only if, at a minimum, the local regulation also fully complies with the corresponding minimum standard in this Subchapter.

(c) A Local Jurisdiction shall not apply exemptions that are not enumerated in this Subchapter. Exceptions requested and approved in conformance with § 1270.06 (Exceptions to Standards) may be granted on a case-by-case basis.

(d) A Local Jurisdiction or Fire Authority may notify the Board upon commencement of any revisions to relevant local regulations. The Board may provide technical assistance to the agency during the revision drafting process.

(e) The Local Jurisdiction or Fire Authority may submit their draft regulation to the Board at least 90 days before the first meeting of the Local Jurisdiction or Fire Authority at which the proposed draft will be presented to the public.

(f) The Board may provide recommendations on the draft within 60 days.

(g) Notwithstanding a local regulation that equals or exceeds the State Minimum Fire Safe Regulations, Building construction shall comply with the State Minimum Fire Safe Regulations.


§ 1270.05. Inspections.

Inspections shall conform to the following requirements:

(a) Inspections in the SRA shall be made by:

(1) the Director, or

(2) Local Jurisdictions that have assumed state fire protection responsibility on SRA lands, or

(3) Local Jurisdictions where the inspection duties have been formally delegated by the Director to the Local Jurisdiction, pursuant to subsection (b).
(b) The Director may delegate inspection authority to a Local Jurisdiction subject to all of the following criteria:

(1) The Local Jurisdiction represents that they have appropriate resources to perform the delegated inspection authority.

(2) The Local Jurisdiction acknowledges that CAL FIRE’s authority under subsection (d) shall not be waived or restricted.

(3) The Local Jurisdiction consents to the delegation of inspection authority.

(4) The Director may revoke the delegation at any time.

(5) The delegation of inspection authority, and any subsequent revocation of the delegation, shall be documented in writing, and retained on file at the CAL FIRE Unit headquarters that administers SRA fire protection in the Local Jurisdiction.

(c) Inspections in the VHFHSZ shall be made by the Local Jurisdiction or Fire Authority.

(d) Nothing in this section abrogates CAL FIRE’s authority to inspect and enforce state forest and fire laws in the SRA even when the inspection duties have been delegated pursuant to this section.

(e) Reports of violations within the SRA shall be provided to the CAL FIRE Unit headquarters that administers SRA fire protection in the Local Jurisdiction.

(f) Inspections conducted by the Director shall be limited to confirming compliance with the State Minimum Fire Safe Regulations. Inspections conducted by the Local Jurisdiction or Fire Authority shall confirm compliance with the State Minimum Fire Safe Regulations. A Local Jurisdiction may, in its discretion, conduct additional inspections with respect to a local regulation that equals or exceeds the State Minimum Fire Safe Regulations.

(g) The Local Jurisdiction shall ensure that any applicable Building construction complies with the applicable sections of this Subchapter.

§ 1270.06. Exceptions to Standards.

(a) The requirements in this section apply to requests for Exceptions from the standards in the State Minimum Fire Safe Regulations.

(b) Upon request by the applicant, an Exception to a standard within this Subchapter may be granted by the inspection entity in accordance with § 1270.05 (Inspections).

(1) Exceptions shall only be granted where the Exception provides for Substantial Compliance with the minimum standards provided in this Subchapter. (2) Exceptions granted by the inspection entity shall be made on a case-by-case basis only, shall be in writing, and shall be supported by Substantial Evidence. Exceptions granted by the inspection entity shall be forwarded to the Board and the appropriate CAL FIRE unit headquarters that administers SRA fire protection in that Local Jurisdiction, or the county in which the Local Jurisdiction is located. Exceptions shall be retained on file at both offices for a period of no less than five (5) years.

(c) Requests for an Exception shall be made in writing to the inspection entity by the applicant or the applicant's authorized representative.

(1) Exception requests shall state

(i) the specific section(s) for which an Exception is requested;

(ii) material facts supporting the necessity for an Exception;

(iii) material facts demonstrating the proposed alternative mean(s) Substantially Complies with the State Minimum Fire Safe Regulation for which the Exception is requested; and

(iv) a map showing the proposed location and siting of the Exception, including address or parcel number, as applicable.

(2) Local Jurisdictions acting as inspection entities pursuant to § 1270.05 (Inspections) may establish additional procedures or requirements for Exception requests.

(d) Exception decisions may be appealed. The Local Jurisdiction may establish or utilize an appeal process consistent with existing local Building or planning department appeal processes.

(1) In addition to local requirements, the Local Jurisdiction shall consult
with the inspection entity prior to making a determination on an appeal.

(2) The inspection entity shall provide documentation demonstrating how the requested Exception does or does not substantially comply with the standards in this Subchapter.

(e) If an appeal is granted, the Local Jurisdiction shall make written findings of the Exception’s Substantial Compliance, as defined §1270.01 (Definitions), with the minimum standards in this Subchapter, supported by Substantial Evidence. Such findings shall include a written statement of reasons for overriding the decision of the inspection entity, if necessary. A written copy of these findings shall be provided to the Board and the CAL FIRE unit headquarters that administers SRA fire protection in that Local Jurisdiction, or in the county in which the Local Jurisdiction is located.


§1270.07. Distance Measurements.
All specified or referenced distances are measured along the ground, unless otherwise stated.


Article 2. Ingress and Egress

§1273.00. Purpose and Application.
(a) New Roads, Driveways, and Road or Driveway Structures, whether public or private, unless exempted under §1270.03(b)-(e) (Scope - Exemptions), shall provide for concurrent Fire Apparatus ingress and civilian evacuation, and shall provide unobstructed traffic circulation during a Wildfire as set forth in this Article.

(b) The provisions of this Article and Article 3 (Signing and Building Numbering) shall apply to all New Roads, Driveways, or Road or Driveway Structures. The provisions of this Article and Article 3 (Signing and Building Numbering) shall further apply to all Existing Roads, Driveways, or Road or Driveway Structures within a
Perimeter.

(c) The provisions of this Article and Article 3 (Signing and Building Numbering) shall further apply to any Existing Road, Driveway, or Road or Driveway Structure that provides Access to Building construction which includes

(1) the permitting or approval of three (3) or more new parcels, excluding lot line adjustments as specified in Government Code (GC) section 66412(d); or

(2) an application for a change of zoning which proposes to increase zoning intensity or density; or

(3) an application for a change in use permit which proposes to increase use intensity or density.

(d) Notwithstanding any other provision in this Subchapter, Building construction is prohibited where Access is provided by a Road that does not meet the minimum requirements in § 1273.12 (Standards for Existing Roads).


§ 1273.01. Horizontal and Vertical Curves / Curb Radii

(a) No Road or Road Structure shall have a horizontal inside radius of curvature (measured from the centerline of the inside lane) of less than fifty (50) feet, except as provided for in subsections (b), (c), and (d).

(1) An additional four (4) feet of surface width shall be added to the required widths in § 1273.05 (Road and Driveway Traffic Lane Width and Clear Width) to curves of 50-100 feet radius.

(2) One (1) foot of additional Road width shall be added to curves of 100-200 feet, as illustrated on Figure 1 and Figure 2.

(3) Flexible posts may be placed within the required radius.

(b) Where the operating speed of a Road is 15 miles per hour (mph) or less, an alternative standard to subsection (a) based on modeling performed by a Professional Engineer, as described within the Professional Engineers Act (Chapter 7 of Division 3 of the Business and Professions Code), that demonstrates Fire Apparatus can negotiate the proposed horizontal inside radius satisfies the requirement of this section.
(c) At intersections where on-street parking and bike lanes may be present or where width allows, smaller curb radii or curb extensions to minimize pedestrian exposure and collision severity are present, the effective turning radius shall not be less than fifty (50) feet as illustrated in Figure 3 below.

(d) At intersections in areas without on-street parking and/or bike lanes where speeds approaching the intersection are less than 15 mph; and traffic volumes on the receiving road are less than 120 vehicles per hour during either an evacuation event or during the peak commute hour, whichever is a higher volume, curb radii of twenty (20) feet based on modeling performed by a Professional Engineer, as described within the Professional Engineers Act (Chapter 7 of Division 3 of the Business and Professions Code), that demonstrates Fire Apparatus can negotiate the proposed horizontal inside radius as illustrated in Figure 4, satisfies the requirement of this section.

(e) The length of vertical curves of roads, exclusive of gutters, ditches, and drainage structures designed to hold or divert water, shall be not less than one hundred (100) feet.
Figure 1
Effective Turning Radius for Horizontal Curvature with 50 Foot Radius

Figure 2
Effective Turning Radius for Horizontal Curvature with 100 Foot Radius
Figure 3
Effective Turning Radius for Intersections with Bike Lanes or Parking
Figure 4
Effective Turning Radius for 20 Foot Wide Road Intersection


§ 1273.02. Road and Driveway Surfaces.

(a) Roads shall support the imposed load of Fire Apparatus weighing 75,000
The surface material of the Road shall be non-erodible (including, but not limited to, a binding agent, gravel, lime slurry, or pavement) and designed to support the required weight at all times, including during saturated soil conditions. (b) Driveways and road and driveway structures shall support at least 36,000 pounds.

(c) The project proponent shall provide certified engineered specifications to support the Road design, if requested by the Local Jurisdiction.


§ 1273.03. Bridge or Elevated Structures on Roads and Driveways.

(a) Signing in conformance with the requirements in Article 3 (Signing and Building Numbering), shall reflect the capability of each bridge or elevated structure, including but not limited to weight or vertical clearance limitations, one-way road or single Traffic Lane conditions, or bridge weight rating limits.

(b) Bridges and elevated structures shall be designed and constructed to accommodate a gross vehicle weight rating of 75,000 pounds. Vehicle load limits shall be posted at both entrances to bridges.

(1) Bridges or elevated structures may support a maximum weight of less than 75,000 pounds if the Fire Authority verifies that the Fire Apparatus most likely to be used will be under the maximum load weight of the bridge.

(2) If the bridge or elevated structure is designed for a lower weight, then it shall be identified through signing as required in Article 3 (Signing and Building Numbering). In no case shall the bridge or elevated structure be designed to support a weight below 36,000 pounds.

(3) American Association of State Highway and Transportation Officials (AASHTO) Standard Specifications for Highway Bridges, 17th Edition, published 2002 (known as AASHTO HB-17), hereby incorporated by reference, may be used in lieu of total vehicle weight if bridges and elevated structures are designed and certified by a Professional Engineer, as described within the Professional Engineers Act (Chapter 7 of Division 3 of the Business and Professions Code).

(c) Where elevated surfaces designed for Fire Apparatus use are adjacent to
surfaces which are not designed for such use, barriers, signs, and/or other distinguishing features, as approved by the Local Jurisdiction, shall be installed and maintained.

(d) Notwithstanding the above requirements, a bridge or elevated structure with only one Traffic Lane satisfies the requirements of this section so long as it provides for unobstructed visibility from one end to the other and Turnouts at both ends. Bridges or elevated structures with only one Traffic Lane shall be implemented consistent with requirements outlined in § 1273.05 (Road and Driveway Traffic Lane Width and Clear Width).

(e) Bridges and elevated structures shall be constructed of non-combustible materials.


§ 1273.04. Road and Driveway Grades.

(a) The grades for all Roads and Driveways shall not exceed sixteen (16) percent.

(b) Notwithstanding subsection (a), Road or Driveway grades of 16 to 20 percent satisfy the requirements of this section if the Road has been treated to prevent slippage (including, but not limited to, aggregate treatments, binding agents, and/or paving) and scraping.

(c) Grade transitions shall be constructed and designed to accommodate maximum approach and departure angles of twelve (12) degrees.


§ 1273.05. Road and Driveway Traffic Lane Width and Clear Width

(a) All bidirectional Roads shall provide a minimum of two ten (10) foot Traffic Lanes, not including Shoulders or striping. Where topographic or other limitations require the two Traffic Lanes to be constructed non-adjacently, each Traffic Lane shall
provide a minimum of twelve (12) feet.

(b) All One-way Roads shall provide a minimum of one twelve (12) foot Traffic Lane.

(c) One-way Roads shall maintain a Clear Width of 20 feet. Bidirectional Roads with a center median shall maintain a Clear Width of 20 feet on either side of the median. This Clear Width may include bike lanes, Shoulders, or flexible barriers used as traffic calming devices or to delineate a bicycle facility, or for other uses.

(d) All Driveways shall be constructed to provide a minimum of one (1) ten (10) foot Traffic Lane, fourteen (14) feet Clear Width, and unobstructed Vertical Clearance of thirteen feet, six inches (13’ 6”).


§ 1273.06 Road and Driveway Vertical Clearances

Roads and Driveways shall provide for a minimum of thirteen feet and six inches (13’ 6”) of unobstructed Vertical Clearance.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290
§ 1273.07 Maximum Lengths of New One-Way Roads
(a) In no case shall a New One-Way Road exceed 2,640 feet in length.


§ 1273.08 Maximum Lengths of New Dead-end Roads
(a) The maximum length of a New Dead-end Road shall not exceed the following cumulative lengths:
   (1) for Roads with parcels zoned not to exceed one (1) acre - 800 feet;
   (2) for Roads with parcels zoned up to 4.99 acres - 1,320 feet;
   (3) for Roads with parcels zoned for 5 acres or larger - 2,640 feet.
(b) All New Dead-end Roads shall meet the Turnaround requirements in § 1273.10 (Road and Driveway Turnarounds).
(c) All New Dead-end Roads shall meet the width requirements in § 1273.05 (Road and Driveway Traffic Lane Width and Clear Width).
(d) Each New Dead-end Road shall be connected directly to a through Road (a Road that is connected to other Roads at both ends).
(e) The length of New Dead-end Roads shall be measured from the center line of the through Road it connects to, to the terminus of the Dead-end Road at its farthest point.
(f) Where a New Dead-end Road provides access to differing zoned parcel sizes requiring different length limits, the shortest allowable length shall apply.


§ 1273.09 Road and Driveway Turnouts
(a) Turnouts shall be a minimum of twelve (12) feet wide from the shoulder stripe, twenty-two (22) feet long with a minimum twenty-five (25) foot taper on each end and be facilitated outside of the Traffic Lane to accommodate one passenger vehicle as
illustrated on Figure 5.

(b) On One-way Roads and Dead-end Roads over 400 feet in length, a Turnout shall be located at approximately the midpoint of the Road, in addition to any other Turnouts Required.

(c) Turnouts shall be provided no more than 400 feet apart on One-way Roads or on Roads that do not meet the width requirements.

(d) Driveways that are less than 20 feet wide and exceed 150 feet in length shall require a Turnout.

(e) Driveways greater than 150 feet in length and less than 800 feet in length shall provide a Turnout near the midpoint of the Driveway.

(f) Where the Driveway exceeds 800 feet, Turnouts shall be provided no more than 400 feet apart.
Figure 5

Turnout Dimensions
§ 1273.10 Road and Driveway Turnarounds

(a) Each Dead-end Road shall have a Turnaround constructed at its terminus. Where a Dead-end Road crosses parcels zoned for five (5) acres or larger, a Turnaround shall also be provided halfway along the Dead-end Road.

(b) A Turnaround shall be provided on Driveways over 300 feet in length and shall be within fifty (50) feet of the Building.

(c) A Turnaround shall meet one of the following requirements in accordance with Figures 6.1, 6.2, or 6.3.

(d) Turnarounds with a radius smaller than 40 feet, shown in Figures 6.2 and 6.3 below, may be approved by the Local Jurisdiction when physical constraints prohibit the ability to install a 40-foot Turnaround.

(e) The center of the Turnaround shall remain clear of vegetation or decorative elements.

(f) If a hammerhead/T is used instead, the top of the “T” shall be a minimum of sixty (60) feet in length.
Figure 6.1
Turnarounds with 40-foot radius
Figure 6.2
Turnarounds with 35-foot radius
Figure 6.3
Turnarounds with 30-foot radius

§ 1273.11 Gates

(a) Gates shall have an approved means of emergency operation. Electronic gates shall have a manual method of opening in case of electronic failure. The manual method shall be maintained operational at all times.

(b) Gate entrances shall be at least two (2) feet wider than the width of the Road or Driveway, as shown in Figure 7 below. Where a gate is installed across an existing Road or Driveway, the gate shall be no less than ten (10) feet wide, with a minimum Clear Width of fourteen (14) feet and unobstructed Vertical Clearance of thirteen feet, six inches (13' 6"). Clearance shall be maintained at all times.

(c) Where a One-way Road with a single Traffic Lane leads to a gated entrance, a forty (40) foot turning radius shall be used as illustrated on Figure 7.

(d) All gates on a Driveway shall be located at least thirty (30) feet from the Road and shall open in direction of travel, in accordance with Figure 7.
§ 1273.12 Standards for Existing Roads

(a) Except as provided in subsections (b) and (d), Existing Roads shall meet the following minimum requirements:

(1) One (1) fourteen (14) foot Traffic Lane;
(2) Native-surfacing for no more than 50% of the Road’s length; and
(3) Turnouts in compliance with § 1273.09 (Road and Driveway Turnouts), or maintains a twenty (20) foot Clear Width suitable to serve as a Traffic Lane for the length of the Road.

(b) Access to Buildings after a Wildfire shall provide for at least one (1) fourteen (14) foot Traffic Lane for a distance of at least twenty-two (22) feet at an interval of at least every 400 feet; provided, however, where such Traffic Lanes are not possible due to physical site limitations such as localized topography, slope stability or soil
conditions, Access shall provide for locations for vehicles to pass each other at reasonable intervals.

(c) Existing Roads providing Access to Buildings shall not exceed a grade of 25% over a distance of 500 linear feet.

(d) An Existing Road with a secondary route in conformance with § 1273.13 (Secondary Routes for Existing Roads) need not comply with subsection (a).


§ 1273.13 Secondary Routes for Existing Roads

(a) Secondary routes shall meet the standards for New Roads in this Subchapter and shall provide for legal and deeded Access that serves as a typical travel way to and from the Building construction. A secured secondary route shall meet the requirements in § 1273.11 (Gates).

(b) Secondary routes shall connect a user to an alternative route that would not be affected by a closure to the primary route, to the extent practicable.


Article 3. Signing and Building Numbering

§ 1274.00. Road Name Signs.

(a) All Road signs shall conform to the requirements of the California Manual of Uniform Traffic Control Devices (CA MUTCD), hereby incorporated by reference.

(b) New Roads shall be identified by a name or number through a consistent system that provides for sequenced or patterned numbering and non-duplicative naming within each Local Jurisdiction. This section does not require any entity to rename or renumber existing roads.

(c) The size of letters, numbers, and symbols for road signs shall be a minimum four (4) inch letter height, half inch (.5) inch stroke, reflectorized, contrasting with the background color of the sign.
§ 1274.01. Road Sign Installation, Location, and Visibility.

(a) Signs required by this article identifying intersecting roads shall be placed at the intersection of those roads.

(b) A sign identifying traffic limitations, including but not limited to weight or Vertical Clearance limitations, Dead-end Roads, One-way Roads, or single lane Roads and bridges, shall be placed:

   (1) at the intersection preceding the traffic limitation, and

   (2) no more than one hundred (100) feet before such traffic limitation.

(c) Road signs required by this article shall be posted at the beginning of construction and shall be maintained thereafter.

(d) Road signs shall meet the minimum sign retroreflectivity requirements in the CA MUTCD. Signs that are not required to meet the retroreflectivity requirements (e.g., blue or brown backgrounds) shall be retroreflective or illuminated to show the same shape and color by both day and night.


§ 1274.02. Addresses for Buildings.

(a) All Buildings shall be issued an address by the Local Jurisdiction consistent with the standards in the California Fire Code, California Code of Regulations title 24, part 9.

   (b) Addresses for residential Buildings shall be reflectorized.


§ 1275.00. Application.

(a) The provisions of this Article shall apply in the tentative and parcel map process when new parcels are approved by the Local Jurisdiction having authority, or when new Building construction is not already served by an existing water supply.

(b) These regulations shall not apply to existing water or wastewater facilities that are not newly constructed, or to existing water or wastewater facilities that are repaired, reconstructed, or upgraded. For purposes of this subsection, "water and wastewater facilities" includes, but is not limited to, water storage tanks and reservoirs, pump stations, treatment facilities, regulator stations, Fire Hydrants, and similar water and wastewater system devices.

(c) Where a specific code standard from the California Fire Code or National Fire Protection Association (NFPA) is referenced in this Article, any sections of the California Fire Code or NFPA standards regarding alternative methods of compliance, equivalencies, or modifications to the specified standards shall also apply.


§ 1275.01. Approved Water Supply.

(a) Water supply shall meet or exceed the California Fire Code, California Code of Regulations Title 24, Part 9.

(b) Where a Municipal-Type Water Supply is not available, the Local Jurisdiction shall utilize the National Fire Protection Association (NFPA) 1142, “Standard on Water Supplies for Suburban and Rural Fire Fighting,” 2017 Edition, hereby incorporated by reference, as referenced in the California Fire Code, California Code of Regulations Title 24, Part 9, Appendix B and Appendix BB.

(c) All Building construction shall include a water supply for structure defense. Such protection shall be serviceable prior to and during the time of construction, except when alternative methods of protection are provided and approved by the Local Jurisdiction.
(d) Nothing in this article prohibits the combined storage of Wildfire and structural firefighting water supplies unless so prohibited by local ordinance or specified by the Local Fire Authority. Water supplies required under the California Fire Code, California Code of Regulations Title 24, Part 9, or other law or regulation may also be used to satisfy the requirements of this Article, so long as the full amount of water supply required by this article is provided.

(e) Where freeze or crash protection is required by the Local Jurisdictions, such protection measures shall be provided.


§ 1275.02. Identification of Water Sources

(a) Fire Hydrants or water access located along a Driveway shall be identified by at least (1) reflectorized blue marker, with a minimum dimension of three (3) inches. This marker shall be mounted on a fire retardant sign post. The sign post shall be located and mounted as specified by the Fire Authority.

(b) Fire Hydrants or water access located along a Road shall be identified by a reflectorized blue marker, with a minimum dimension of three (3) inches. This marker shall be mounted on a fire-retardant sign post. The sign post shall be within three (3) feet of the Fire Hydrant or water access. The sign shall be no fewer than three (3) nor greater than five (5) feet above ground, in a horizontal position, and visible from the Road, or as specified by the Fire Authority.


§ 1275.03. Secured Water Sources.

Break away locks or similar systems approved by the Local Jurisdiction shall provide fire fighters with access to any water connections, valves, or controls that are normally secured by gates, doors, or other locking systems.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290
§ 1275.04. Municipal-Type Water System Hydrants.

(a) The Municipal-Type Fire Hydrant shall be eighteen (18) inches above the finished surface. Its location in relation to the Road or Driveway and to the Building(s) or structure(s) it serves shall comply with California Fire Code, California Code of Regulations Title 24, Part 9, Chapter 5, and Appendix C.

(b) The Municipal-Type Fire Hydrant shall be sizes designated by the Local Jurisdiction, in consultation with the Fire Authority, and shall have male American National Fire Hose Screw Threads (NH).

(c) Where Municipal-Type water supply Fire Hydrant systems are not practical due to the absence of a Municipal-Type Water System, or other limiting factors, a performance-based water supply alternative approved by the Local Jurisdiction, in consultation with the Fire Authority, shall be designed and installed to meet the minimum fire flow water supply requirements of 250 gallons per minute (gpm) for two (2) hours.


§ 1275.05. Dry Hydrants

When dry hydrants have been approved by the Local Jurisdiction, the requirements of NFPA 1142 (2017) Chapter 8 (8.3, 8.4, 8.5, 8.6, 8.7 and 8.8), hereby incorporated by reference, shall be met.


§ 1275.06. Mobile Water Supply (Water Tenders)

(a) Fire water delivery systems that rely on mobile water supply (water tenders) shall only be permitted under the following conditions:

   (1) During the construction phase of a new Development, prior to the permanent fire water delivery system installation; or,
(2) When the Local Jurisdiction determines that all other means of water supply is not practical.

(b) The mobile water supply shall, within five (5) minutes of the arrival of the first Fire Apparatus on-scene, be capable of providing the Fire Apparatus with a minimum of 250 gpm for a 2-hour duration.

(c) Mobile water supplies may use NFPA 1142 (2017) Annex C, hereby incorporated by reference, to achieve minimum fire flow requirements.


§ 1275.07. Protection of Water Supply Infrastructure from Wildfire.

(a) All water supply infrastructure shall be protected from Wildfire radiant heat, convective heat, and embers by at least one of the following:

(1) underground burial; or

(2) construction of non-combustible materials, fittings and valves, such as concrete or metal; or

(3) maintenance of a 100-foot, slope-adjusted defensible space immediately surrounding the infrastructure; or

(4) placement within a Building constructed to the requirements of the California Building Code (California Code of Regulations Title 24, Part 2) Chapter 7A.


Article 5. Building Siting, Setbacks, and Fuel Modification

§ 1276.00. Applicability

(a) All Building construction shall comply with the following provisions of this Article: § 1276.01 (Building and Parcel Siting and Setbacks); § 1276.02(c) (Ridgelines); and § 1276.06 (Disposal of Flammable Vegetation and Fuels).

(b) The following provisions of this article shall further apply in the tentative and parcel map process for new parcels: § 1276.01 (Building and Parcel Siting and
Setbacks); § 1276.02(c) (Ridgelines); § 1276.03 (Fuel Breaks); § 1276.04 (Greenbelts, Greenways, Open Spaces and Parks); § 1276.05 (Maintenance of Fuel Breaks); and § 1276.06 (Disposal of Flammable Vegetation and Fuels).


§ 1276.01. Building and Parcel Siting and Setbacks.

(a) All parcels shall provide a minimum thirty (30) foot setback for all Buildings from all property lines and/or the center of a Road, except as provided for in subsection (b).

(b) A reduction in the minimum setback shall be based upon practical reasons, which may include but are not limited to, parcel dimensions or size; topographic limitations; development density requirements or other development patterns that promote low-carbon emission outcomes; sensitive habitat; or other site constraints, and shall reduce Structure-to-Structure ignition by incorporating features such as, but not limited to:

(1) non-combustible block walls or fences; or

(2) five (5) feet of non-combustible material extending five (5) feet horizontally from the furthest extent of the Building; or

(3) installing hardscape landscaping or reducing exposed windows on the side of the Structure with a less than thirty (30) foot setback; or

(4) additional structure hardening that exceeds the requirements in the California Building Code, California Code of Regulations Title 24, Part 2, Chapter 7A.


§ 1276.02. Ridgelines.

(a) The Local Jurisdiction shall identify strategic Ridgelines, if any, in consultation with the Fire Authority. Strategic Ridgelines shall be identified through an assessment of the following factors:

(1) Topography;
(2) Vegetation;
(3) Proximity to any existing or proposed residential, commercial, or industrial land uses;
(4) Ability to support effective fire suppression; and
(5) Other factors, if any, deemed relevant by the Local Jurisdiction and Fire Authority.

(b) Preservation of Undeveloped Ridgelines identified as strategically important shall be required.

(c) New Buildings on Undeveloped Ridgelines identified as strategically important are prohibited. Nothing in this subsection shall be construed to alter the extent to which Structures or Development other than Buildings, such as but not limited to Utility and Miscellaneous Group U Structures, may be constructed on Undeveloped Ridgelines.

(d) The Local Jurisdiction may implement further specific requirements to preserve Undeveloped Ridgelines.


§ 1276.03. Fuel Breaks

(a) When Building construction meets the following criteria, the Local Jurisdiction shall determine the need and location for Fuel Breaks in consultation with the Fire Authority:

(1) the permitting or approval of three (3) or more new parcels, excluding lot line adjustments as specified in Government Code (GC) section 66412(d); or
(2) an application for a change of zoning increasing zoning intensity or density; or
(3) an application for a change in use permit increasing use intensity or density.

(b) Fuel Breaks required by the Local Jurisdiction shall be located, designed, and maintained in a condition that reduces the potential of damaging radiant and convective heat or ember exposure to Access routes, Buildings, or infrastructure within the
(c) Fuel Breaks may be required at locations such as, but not limited to:

(1) Directly adjacent to Defensible Space to reduce radiant and convective heat exposure, ember impacts, or support fire suppression tactics;

(2) Directly adjacent to Roads to manage radiant and convective heat exposure or ember impacts, increase evacuation safety, or support fire suppression tactics;

(3) Directly adjacent to a Hazardous Land Use to limit the spread of fire from such uses, reduce radiant and convective heat exposure, or support fire suppression tactics;

(4) Strategically located along Ridgelines, in Greenbelts, or other locations to reduce radiant and convective heat exposure, ember impacts, or support community level fire suppression tactics.

(d) Fuel Breaks shall be completed prior to the commencement of any permitted construction.

(e) Fuel Breaks shall be constructed using the most ecologically and site appropriate treatment option, such as, but not limited to, prescribed burning, manual treatment, mechanical treatment, prescribed herbivory, and targeted ground application of herbicides.

(f) Fuel Breaks shall have, at a minimum, one point of entry for fire fighters and any Fire Apparatus. The specific number of entry points and entry requirements shall be determined by the Local Jurisdiction in consultation with the Fire Authority.


§ 1276.04. Greenbelts, Greenways, Open Spaces and Parks

(a) Where a Greenbelt, Greenway, open space, park, landscaped or natural area, or portions thereof, is intended to serve as a Fuel Break, the space or relevant portion thereof shall conform with the requirements in § 1276.03 (Fuel Breaks).

(b) Local Jurisdictions may require Greenbelts or Greenways or other open areas for the purpose of providing potential areas of refuge for the public or firefighters or
other values as a last resort, if safe evacuation is not practicable.


§ 1276.05. Maintenance of Fuel Breaks

(a) Where a Local Jurisdiction requires Fuel Breaks pursuant to § 1276.03 (Fuel Breaks), maintenance mechanisms shall be established to ensure the fire behavior objectives and thresholds are maintained over time.

(b) The mechanisms required shall be binding upon the property for which the Fuel Break is established, shall ensure adequate maintenance levels, and may include written legal agreements; permanent fees, taxes, or assessments; assessments through a homeowners’ association; or other funding mechanisms.


§ 1276.06 Disposal of Flammable Vegetation and Fuels

The disposal, including burning or removal to a site approved by the Local Jurisdiction, of flammable vegetation and fuels caused by site development and construction, road and driveway construction shall be in accordance with all applicable laws and regulations.