
CHAPTER 82.13 FIRE SAFETY (FS) OVERLAY

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82.13.010 Purpose

The Fire Safety (FS) Overlay established by Sections 82.01.020 (Land Use Plan and Land Use Zoning Districts) and 82.01.030 (Overlays) is created to provide greater public safety in areas prone to wildland brush fires, by establishing additional development standards for these areas.

Adopted Ordinance 4011 (2007); Amended Ordinance 4067 (2009)

82.13.020 Location Requirements

The FS Overlay shall be mapped on the General Plan Hazards Maps with the boundaries derived from the California Department of Fire and Rescue (Cal Fire), U.S. Forest Service, and the County Fire Protection District (County Fire)..

Adopted Ordinance 4011 (2007); Amended Ordinance 4067 (2009) ; Amended Ordinance XXXX (2017)

82.13.030 Fire Safety Overlay Area

The FS Overlay corresponds to distinct geographic areas and the associated wildland fire hazard. The requirements applicable to the fire safety area are found in Section 82.13.050 (General Development Standards),.

The Fire Safety Overlay includes areas within the mountains, valley foothills, and desert region designated by the Fire Authority as a wildfire risk area. It includes all the land generally characterized by areas varying from relatively flat to steep sloping terrain and with moderate to heavy fuel loading contributing to high fire hazard conditions. Present and future development within the Fire Safety Overlay is exposed to the impacts of wildland fires and other natural hazards primarily due to native fuel types, topography, and prevailing weather conditions such as Santa Ana winds. These factors contribute to the potential of extreme wild land fire behavior conditions.

Adopted Ordinance 4011 (2007); Amended Ordinance 4067 (2009); Amended Ordinance XXXX (2017)

82.13.040 Application Requirements

- (a) **Notice of Planning application or Building permit.** A notice of each Planning application and/or Building and Safety building permit, that would lead to the construction of one or more structures or the subdivision of land within the FS Overlay shall be sent to the responsible Fire Authority for comment.
- (b) **Review authorities.** Each proposed land use application that would lead to the construction or expansion of a structure or the subdivision of land shall be submitted to the responsible fire authority and the appropriate Natural Resource Conservation Service Office for review and recommendation. Any recommendations received shall be indicated in any staff report and/or presentation for the proposed development and shall be incorporated into project conditions of approval where possible.
- (c) **Fuel modification plan.** Each project application shall include a fuel modification plan describing the fuel modification area required in Subsection 82.13.050(1), below. The plan may be submitted as a preliminary and final plan. A preliminary and/or final plan shall be submitted concurrently with the development application to the Department for review in conjunction with the project design review. Final plans shall be reviewed and approved by the responsible Fire Authority. The fuel modification plan shall address the standards in Subsection 82.13.050(1) below, and the following factors:
 - (1) The natural ungraded slope of the land within the project and in the areas adjacent to the project;
 - (2) Fuel loading;
 - (3) Access to the project and access directly to the fuel modified area;
 - (4) The on-site availability of water that can be used for fire fighting purposes;
 - (5) The continual maintenance of the fuel modified areas;
 - (6) The soil erosion and sediment control measures to alleviate permanent scarring and accelerated erosion; and
 - (7) A list of recommended landscape plant materials that are fire resistant.
- (d) **Subdivisions.** When 25 percent or more of a subdivision project site involving five or more lots is located on natural slopes greater than 30 percent, the subdivision application shall be submitted concurrently with a Planned Development application to evaluate appropriate project design in consideration of topographic limitations of the site. This provision shall not apply if all of the areas on the site with natural ungraded slopes over 30 percent are permanently restricted from structural development. Each subdivision

application shall include the following slope analysis information:

- (1) A topographic map of the proposed project area and all adjoining properties within 150 feet at a scale of not less than one-inch to 200 feet. The contour interval shall not be more than two feet except that the contour interval may be five feet if the general natural ungraded slope is more than 10 percent. Contour lines shall be obtained by aerial or field survey, done under the supervision of a licensed Land Surveyor or Registered Engineer.
- (2) The natural, ungraded, slope categories to be computed are zero percent to less than 15 percent, 15 percent to less than 30 percent, 30 percent to less than 40 percent, and 40 percent and greater. The minimum area (polygon) used for slope calculation shall be 5,000 square feet.
- (3) The area, in acres, shall be tabulated for each category.

Adopted Ordinance 4011 (2007); Amended Ordinance 4067 (2009); Amended Ordinance 4098 (2010); Amended Ordinance XXXX (2017)

82.13.050 General Development Standards

Each proposed development shall comply with all applicable requirements of this Chapter, as follows.

- (a) **All phases.** The requirements of this Chapter shall apply to all phases of a development project.
- (b) **Fire Authority standards.** All proposed development shall comply with applicable standards required by the responsible Fire Authority. This shall include the standards and provisions of the California Building Code (CBC) Chapter 7A (Materials and Construction Methods for Exterior Wildfire Exposure) and California Residential Code (CRC) Chapter 327 which are included in this code by reference.
- (c) **Applicability of land use zoning district standards and overlay standards.** The development standards established by a land use zoning district and any applicable overlay shall apply, except as modified by this Chapter.
- (d) **Additions, alterations, enlargements, or reconstructions.** Any addition, alteration, enlargement or reconstruction of a structure shall comply with the provisions of this Chapter. When an addition, alteration, enlargement or reconstruction of a structure equals or exceeds 50 percent of the existing structure, or 25 percent of the roof for roofing requirements only, the provisions of Section 82.13.050(h) (Building separation standards), and Section 82.13.050(p) –(Building construction requirements), shall apply to the entire structure and/or the whole roof as applicable. The structures and/or roofs shall be entirely retrofitted to comply with the requirements of this Chapter.

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- (e) **Residential slope density.** In order to reduce fire hazards, prevent erosion, and to preserve the existing vegetation and visual quality, the density of development for any Tentative Parcel Map or Tentative Tract Map in hillside areas shall be in compliance with the following criteria:
- (1) One to four dwelling units per gross acre on slopes of zero to less than fifteen percent (0-<15%);
 - (2) Two dwelling units per gross acre on slopes of 15 to less than 30 percent (15-<30%);
 - (3) One dwelling unit per three gross acres on slopes of greater than 30 to less than 40 percent gradient;
 - (4) One dwelling unit per ten gross acres on slopes of 40 percent or greater gradient;
 - (5) In the Rancho Cucamonga Sphere of Influence, zero density is allowed for any portion of a proposed Tentative Parcel Map or Tentative Tract Map on slopes of greater than 30 percent gradient.
- (f) **Site and emergency access.** Each development project and each development project phase, except for a development project located exclusively on a cul-de-sac, shall have a minimum of two points of vehicular ingress and egress, designed to County road standards, with a minimum width of 26 feet of all-weather surface as defined in the California Fire Code, from existing and surrounding streets. The Department may authorize one point of vehicular access to be an emergency access route with an all-weather surface if the Department first makes each of the following findings:
- (1) Two points of nonemergency access are physically infeasible;
 - (2) Provisions have been made to reasonably ensure that the emergency access will be maintained; and
 - (3) Based on the review and consideration of the Fire Authority's recommendation, the emergency access route will provide adequate vehicular ingress and egress during emergencies.
- (g) **Private driveways or access roadways.** Private driveways or access roadways for residential units shall not exceed 150 feet in length, unless approved by the Fire Authority in compliance with the California Fire Code.
- (h) **Perimeter access to fuel modified and fire hazard areas.** Fire fighting vehicles shall have adequate access into areas between fire hazardous areas or fuel modified areas and the development perimeter, so that a wildland fire can be contained at the development perimeter and prevented from spreading to structures. Each development project shall provide adequate vehicular access for fire fighting vehicles to the development perimeter of the project along the portion of the development perimeter that is adjacent to either an

existing or proposed fuel modified area, or a fire hazard area. Provisions shall be made and shall be required, where necessary, through conditions of approval for the development project for the continual maintenance of the areas intended to provide the access. Perimeter access shall be provided, through either of the following measures or through alternate measures in compliance with Section 82.13.090 (Alternate Hazard Protection Measures).

- (1) The provision of an existing or proposed road along the development perimeter, or portion thereof that is exposed to a fire hazard or fuel modified area, and which is accessible to fire fighting equipment. The road shall be capable of supporting fire-fighting equipment, shall be at least 20 feet in width, and shall not exceed a grade of 14 percent. The conditions of approval for the development project shall require provisions to ensure that the roadway will be maintained, if it is not within the publicly maintained road system.
 - (2) Development projects shall provide access ways, at least 12 feet in width, with a grade not to exceed 14 percent, and capable of supporting fire fighting vehicles, between the development perimeter and proposed or existing streets. Access ways shall be spaced at intervals of no more than an average of 350 feet along each street. The conditions of approval for the development project shall require specific provisions to ensure that access ways will remain unobstructed and will be maintained. Where feasible, access ways may not be paved and shall be designed so as not to detract from the visual quality of the project.
- (i) **Length of cul-de-sacs.** Cul-de-sacs shall not exceed 350 feet in length, except that they may be extended as allowed by this Subsection.
- (1) **Exception for parcels of less than five acres.** A cul-de-sac may exceed 350 feet in length but shall not exceed 600 feet in length, if parcels that take access from the cul-de-sac are less than five acres, and:
 - (A) Alternate measures are utilized in compliance with Section 82.13.090 (Alternate Hazard Protection Measures); or
 - (B) Based upon consideration of the recommendation of the Fire Authority, the Department determines that the cul-de-sac is situated and designed so that each parcel taking access from it is not contiguous to or exposed to either undeveloped fuel modified areas along the development perimeter of the project or to fire hazard areas, and that the extension of the cul-de-sac will not increase the exposure of buildings to wildland fires.
 - (2) **Exception for parcels larger than five acres.** A cul-de-sac may exceed 600 feet in length if all parcels that take access from the cul-de-sac are five acres or greater in area and:
 - (A) The proposed cul-de-sac is not within or adjacent to areas that are zoned for or subdivided to parcels of five acres or less.

- (B) Alternate measures are utilized in compliance with Section 82.13.090 (Alternate Hazard Protection Measures).
- (3) **Alternate measures.** In compliance with Section 82.13.090 (Alternate Hazard Protection Measures) and dependent upon site specific conditions, one of the following measures or combination of measures may be used to mitigate the effect of creating cul-de-sacs up to 600 feet in length with parcels less than five acres in area:
 - (A) Limitation of the total number of dwelling units with access to the cul-de-sac to no more than 15, and restriction of further subdivision of parcels and construction of additional independent residential units which have access to the cul-de-sac. These restrictions shall be imposed through conditions of approval of the development project.
 - (B) A continuous perimeter access road at least 20 feet in width is provided along the portion of the cul-de-sac exposed to fire hazard or fuel modified areas such that it is drivable under normal conditions by fire fighting vehicles, provides adequate maneuvering space for the vehicles, and is designed so that at least one point of access to the perimeter access road is taken from roads other than the subject cul-de-sac.
 - (C) The cul-de-sac road will have a paved width of at least 40 feet with posted no parking for its entire length, and there is at least one area approximately at the midpoint of the cul-de-sac that serves the same function of a cul-de-sac bulb in allowing fire fighting vehicles adequate room to turn around. This measure may only be utilized if the expansion of the road width will not contribute to slope stability hazards either on-site or off-site.
 - (D) Other alternate measures approved by the Department in compliance with Section 82.13.090 (Alternate Hazard Protection Measures).
- (j) **Fences.**
 - (1) Where wood or vinyl fencing is used, there shall be a minimum five-foot separation between the wood or vinyl fencing and the wall of the nearest structure except on those properties where previous construction occurred in compliance with a previous code. Fencing within the five-foot separation area shall be of noncombustible material or modified one-hour fire-resistance-rated construction.
 - (2) Fences or walls required adjacent to fuel modification areas or wildland areas as conditions of approval for a development project shall be constructed of noncombustible materials as defined in the California Building Code. All other fences, including those on the interior of a development project, are not subject to this requirement, except as required in subparagraph a, above.

- (3) Where side and rear yards are enclosed by fencing, gates shall be provided on both side yards for emergency access to the rear yard.
- (k) **Access to water supplies.** There shall be vehicular access, at least 12 feet in width, to within at least 10 feet of each static water source, including ponds, lakes, swimming pools, reservoirs and water storage tanks. Access shall be either to a plumbed outlet with two-and-one-half-inch National Hose Thread Fitting, or directly to the source. This requirement shall be waived if the Fire Authority determines that the water source is sufficiently below the elevation of existing or proposed roads or driveways to make drafting of water from the source through a plumbed outlet infeasible, and that direct vehicular access to the water source would require an impractical extension of a road or driveway.
- (l) **Fuel modification areas.**
- (1) A permanent fuel modification area shall be required around a development project or portions thereof that are adjacent or exposed to hazardous fire areas for the purpose of fire protection. In no case shall this area be less than 100 feet in width as measured from the development perimeter. Where feasible, the area shall be designated as common open space rather than private open space. The recommended width of the fuel modification area shall be determined based on a fuel modification plan filed in compliance with Subsection 82.13.040(c) (Application Requirements – Fuel modification plans), above.
 - (2) When a development project is phased, individual phases may be required to provide temporary fuel modification areas, where the development perimeter of a phase is contiguous to a subsequent phase of a project, which in its undeveloped state is a hazardous fire area. The need for a temporary fuel modification area shall be determined by the responsible Fire Authority in conjunction with the County Fire Marshall and shall be based upon the same considerations described in Paragraph A, above, for permanent fuel modification areas and the factors addressed in the required fuel modification plan.
- (m) **Separation/Setback requirements.** Each proposed structure shall comply with the following separation/setback requirements as applicable, in addition to the setbacks required by the applicable primary land use zoning district, and the building separation requirements in Subsection (o). (Building separation standards), below.
- (1) **Fuel tanks.** Fuel tanks (e.g., liquefied petroleum gas tanks) shall be located at least 10 feet away from any structure and shall be in compliance with the standards in the California Fire Code, Section 83.02.080 (Allowed Projections into Setbacks), and Section 83.01.060 (Fire Hazards). The tanks shall be secured to the ground.
 - (2) **National Forest boundary.** Each structure on a lot one acre or greater in size, that abuts a boundary of the San Bernardino National Forest, shall be set back at least 30 feet from the property line or boundary of the National Forest per the requirements of CCR 14 1276.01 and the Public Resources Code 4290. Each

structure on a lot which is less than one acre in size, that abuts a boundary of the San Bernardino National Forest, shall adhere to the setback requirements established by the land use zoning district.

- (3) **Sloping site setbacks or fuel modification.** Each structure proposed upslope, in an area with slopes exceeding 30 percent before grading and greater than 30 feet in height shall comply with the following requirements:
 - (A) For existing parcels, the vegetation on the slopes shall be treated in a manner so that it becomes a fuel modified area. The fuel-modified area shall be maintained for either the entire slope, or 100 feet from the structure, or to the property line, whichever distance is less. For newly created parcels, the vegetation shall be maintained as outlined above, or prescribed by a fuel modification plan.
 - (B) Where grading is utilized or proposed, that does not conform to the natural slope and the graded area is adjacent to natural ungraded slopes that are greater than 30 percent in gradient and greater than 30 feet in height, each structure proposed upslope from the toe of the slope, shall be set back at least 30 feet from the edge of the slope.
- (n) **Decks.** Cantilevered or standard type decks shall be composed of noncombustible or ignition resistant materials, as defined and in accordance with the California Building Code Chapter 7A or the California Residential Code Section 327, as approved by the responsible Fire Authority.
- (o) **Building separation standards.** The intent of the following exterior wall separation standards is to reduce the exposure and risk from adjacent structural fires and to reduce the potential spread of fire from structure to structure.
 - (1) Building separation standards in the Fire Safety Overlay
 - (A) Residential structures shall have interior side yard setbacks of 20 percent of the lot width, provided that these interior side yards shall not be less than five feet and need not exceed 15 feet. In no case shall exterior wall separations be less than 10 feet for all buildings, including those on adjoining parcels. Eaves shall be permitted to project into the required setback no more than two feet. No other projections shall be allowed less than five feet to side or rear property lines.
 - (B) In compliance with Section 82.13.090 (Alternate Hazard Protection Measures), and dependent upon site specific conditions, the following measures or combinations of measures may be substituted for the exterior wall separation requirements for all structures in the Fire Safety Overlay area:

- (I) The expansion of fuel modified areas around the perimeter of the development project beyond that required by this Section or other requirement of the County Code.
- (II) A substantial transfer of density from steeper slopes, including areas with slopes less than 30 percent if they exist on-site, to less steep areas within the development project.
- (III) Clustering of structures away from the development perimeter and away from fire hazard areas.
- (IV) Other alternate measures if approved by the Fire Authority in compliance with Section 82.13.090 (Alternate Hazard Protection Measures).

(p) Building construction requirements.

- (1) **Fascia.** Fascia shall be two inches nominal solid wood or stucco or equivalent protection.
- (2) **Exterior glazing.** Exterior glazing shall comply with the provisions of the California Building Code and with the following additional requirements:
 - (A) Vinyl window frame assemblies shall be prohibited, except when they have all of the following characteristics:
 - (I) Frame and sash are comprised of vinyl material with welded corners;
 - (II) Metal reinforcement in the interlock area;
 - (III) Glazed with insulated glass or tempered;
 - (IV) Frame and sash profiles are certified in American Architectural Manufacturing Association (AAMA) Lineal Certification Program (verified with either an AAMA product label or Certified Products Directory); and
 - (V) Certified and labeled in compliance with American National Standards Institute (ANSI)/AAMA/National Wood Window and Door Association (NWWDA) structural requirements.
- (3) **Insulation.** Paper-faced insulation shall be allowed in attics or ventilated spaces only if the paper is not exposed to the attic open space. Cellulose insulation is required to be fire retardant.
- (4) **Roof coverings.** Roof coverings shall be either noncombustible or shall be fire retardant material not composed of organic fiber with a minimum Class A rating,

as defined in the California Building Code. The tile shall be tight-fitting and the open ends of high-profile tile shall be capped with non-ignitable material to prevent birds' nests or other combustible material from accumulating. Gutters and downspouts shall be constructed of noncombustible material.

- (q) **Additional requirements.** Dependent upon specific site conditions (e.g., building separation, fire flow, road conditions, slope, vegetation, etc.) or a combination of conditions, the responsible Fire Authority may require structures to meet more stringent construction standards (e.g., full perimeter exterior walls to be constructed to the modified or full one-hour construction standards, soffitted eaves, etc.) as additional mitigation to the fire threat.
- (r) **Unoccupied Structures.** At the discretion of the responsible Fire Authority, the fire safety development standards for projects located within a Fire Safety Overlay that only propose to construct unoccupied structures may be altered at the discretion of the responsible Fire Authority on a case-by-case basis without an approved variance.

Adopted Ordinance 4011 (2007); Amended Ordinance 4057 (2008); Amended Ordinance 4067 (2009); Amended Ordinance XXXX (201X)

82.13.060 (Reserved)

Adopted Ordinance 4011 (2007); Amended Ordinance 4043 (2008); Amended Ordinance 4067 (2009); Amended Ordinance 4085 (2009); Amended Ordinance 4245 (2014); Amended Ordinance XXXX (2017)

82.13.070 (Reserved)

Adopted Ordinance 4011 (2007); Amended Ordinance 4043 (2008); Amended Ordinance 4067 (2009)

82.13.080 (Reserved)

Adopted Ordinance 4011 (2007); Amended Ordinance 4043 (2008); Amended Ordinance 4067 (2009); Amended Ordinance 4085 (2009); Amended Ordinance XXXX (2017)

82.13.090 Alternate Hazard Protection Measures

- (a) **Purpose.** This Section allows greater design flexibility than would otherwise be permitted to more efficiently and effectively achieve the purposes of the FS Overlay. Design flexibility is provided by allowing the substitution of alternate measures for otherwise applicable requirements if it is found that they provide the same or a greater level of protection from wildland fires and other natural hazards, and that they will fulfill the same purpose as the established standard or requirement.

(b) Applicability.

- (1) The provisions of this Section following shall apply only to the standards and requirements of:
 - (A) Subsection 82.13.050(h) (Perimeter access to fuel modified and fire hazard areas); and
 - (B) Subsection 82.13.050(i)(Length of cul-de-sacs); and
 - (C) Subsection 82.13.050(o) (Building separation standards in the Fire Safety Overlay).
- (2) Since these alternative measures apply to the standards and requirements that pertain to these three specific design elements, they are intended to be applied to development projects only and not to individual parcel conditions. Therefore, they do not apply to the determination of setbacks for residential construction on individual lots.

(c) Substitution of alternative measures for standards and requirements.

- (1) If alternative measures are proposed, the Fire Authority shall determine, with specific consideration of the effect of the proposed alternative measures, whether the proposed development project has adequate provisions for fuel modification and management, including the ongoing maintenance of fuel modified areas.
- (2) If the Fire Authority makes a positive determination in compliance with Paragraph 1, above, alternate measures may be substituted for the established standards and requirements if the Department, with consideration of the recommendation of the Fire Authority, finds and justifies all of the following:
 - (A) The approved alternative measures meet the intent of, and serve the same purpose as, the established standard or requirement.
 - (B) The approved alternative measures provide the same or a greater level of protection or are as effective as the established standard or requirement.
 - (C) There are clear and substantial reasons for utilizing the alternative measures because they provide for a more efficient and economic use of the site, or provide for a superior physical design, and are consistent with the intent of the FS Overlay.

Adopted Ordinance 4011 (2007); Amended Ordinance 4057 (2008); Amended Ordinance 4067 (2009); Amended Ordinance XXXX (2017)