

Parcel Assessment for Wildfire Hardening (PAWH)

☐ 1 Parcel Information	
Assessor:	Date:
Property Address:	
Property Owners:	
Phone #:	Email:
Fire Hazard Severity Zone:	Housing Density Type:
Ignition-Resistant Construction Class: ☐ 1 ☐ 2 ☐ 3	FireWise Community: ☐ Yes ☐ No
☐ 2 Parcel Image	

Insert an image showing a birdseye view of the parcel and neighboring parcels.

☐ 3 Parcel Images (Take pictures of the residence from each corner of the parcel)	
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☐ NW

☐ NE

☐ SW

☐ SE

☐ 4

FHSZ Viewer Image

<https://experience.arcgis.com/experience/03beab8511814e79a0e4eabf0d3e7247/>

☐ 5

Housing Density - Select the Structure Separation Distance (SSD)

☐ 5.1

Low Density - SSD > 100 ft



☐ 5.2

Medium Density - SSD 30 ft - 100 ft



☐ 5.3

High Density - SSD 6 ft - 30 ft



☐ **6** **ADU/Shed/Detached Garage - Structure Separation Distance (SSD)**

☐ 6.1 **Low Density - SSD > 100 ft**


What type of structure & how many?

☐ 6.2 **Medium Density - SSD 30 ft - 100 ft**


What type of structure & how many?

☐ 6.3 **High Density - SSD 6 ft - 30 ft**


What type of structure & how many?

☐ **7** **Wildland-Urban Interface - Intermix, Perimeter, or Interior?**

0 - miles
↔
0.25 miles
→

Wildlands Single Family Residence Intermix	Community Interface - Perimeter	Community Interface - Interior
7.1 ☐	7.2 ☐	7.3 ☐

☐ **8** **Housing Density Type (Record in section 1)**

Table 2. WUI Types classified by structure separation distance (SSD) and typical parcel size.

Type #	WUI Type Name	SSD (ft)	Typical Parcel Size (ac)	Typical Housing Density (struct/ac)
1	High Density Interface – Perimeter	6 ^a to 30	< 0.5	2 to 8 +
2	High Density Interface – Interior ^b	6 ^a to 30	< 0.5	2 to 8 +
3	Medium Density Interface – Perimeter	30 to 100	0.5 to 1+	< 2
4	Medium Density Interface – Interior ^b	30 to 100	0.5 to 1+	< 2
5	Medium Density Intermix	30 to 100	0.5 to 1+	< 2
6	Low Density Interface	100+	1+	< 1
7	Low Density Intermix	100+	1+	< 1

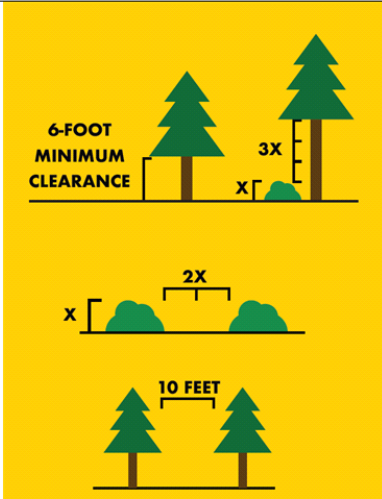
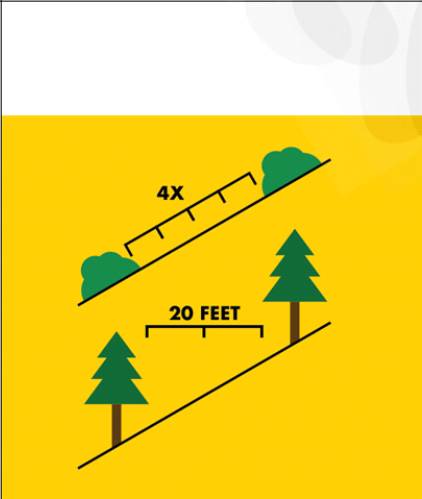
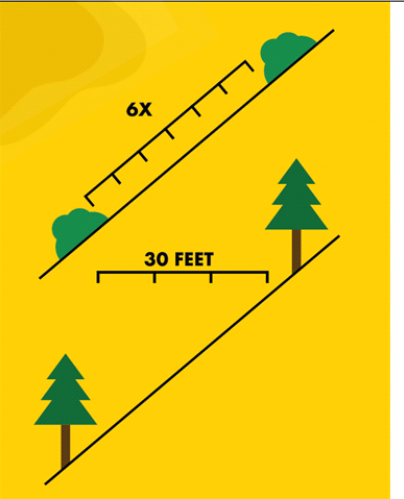
For SI: 1 ft = 0.305 m, 1 ac = 0.4 ha

^a representative of parcels with a 3 ft setback (common for new construction of sprinklered residences)

^b interior of community defined as > 0.25 mi (400 m) from wildlands

Natl. Inst. Stand. Technol. Tech. Note 2205, page 8, Table 2 (March 2022)

9	C.F.C. Chapter 49 Section 4906 - Vegetation Management	Mitigate?
☐ 9.1	Is there an existing landscape plan? (If yes, include it at the end of this assessment)	☐ Yes ☐ No
☐ 9.2	Shrubs shall not exceed 6 ft in height. If yes, describe below.	☐ Yes ☐ No
☐ 9.3	Groupings of shrubs are limited to aggregate diameter of 10 ft.	☐ Yes ☐ No
☐ 9.4	Shrub groupings shall be separated from other groupings a minimum of 15 ft.	☐ Yes ☐ No
☐ 9.5	Shrub groupings shall be separated from structures a minimum of 30 ft.	☐ Yes ☐ No
☐ 9.6	Where shrubs are located below or within a tree's drip line, the lowest tree branch shall be a minimum of 3x the height of the understory shrubs or 10 ft, whichever is greater.	☐ Yes ☐ No
☐ 9.7	New trees that are fire resistant shall be planted and maintained so that the tree's drip line at maturity is a minimum of 10 ft from any structure.	☐ Yes ☐ No
☐ 9.8	The horizontal distance between crowns of new trees and crowns of adjacent trees shall not be less than 10 ft.	☐ Yes ☐ No
☐ 9.9	Existing trees shall be trimmed to provide a minimum separation of 10 ft away from chimney and stovepipe outlets.	☐ Yes ☐ No
*Note: New trees not classified as fire-resistant vegetation, such as conifers, palms, pepper trees and eucalyptus species, shall be permitted provided the tree is planted and maintained so that the tree's drip line at maturity is a minimum 30 ft from any structure.		

10	Slope of Vegetation		
	Flat to Mild	Mild to Moderate	Moderate to Steep
	 6-FOOT MINIMUM CLEARANCE 3X X 2X 10 FEET Flat to mild slope (<20%)	 4X 20 FEET Mild to moderate slope (20%–40%)	 6X 30 FEET Moderate to steep slope (>40%)

<https://www.paperturn-view.com/cal-fire-communications/cal-fire-ready-set-go-brochure-final-files-v4-print?pid=MjU252417&p=11&v=2%3F>

- ☐ 10.1 Select which slopes are found on this parcel. ☐ <20 deg. ☐ 20 - 40 deg. ☐ >40 deg.
- ☐ 10.2 Select which slopes are found adjacent to this ☐ <20 deg. ☐ 20 - 40 deg. ☐ >40 deg. parcel.
- ☐ 10.3 Minimum Fuel Separation Distance if slope of concern is between wildland fuels & structures. (Applies to **Perimeter** and **Intermix** settings. See "Housing Density Type" chart in section 8.)
- ☐ Flat to mild slope (<20 degrees) = **100ft**
 - ☐ Mild to moderate slope (20 - 40 degrees) = **150ft**
 - ☐ Moderate to steep slope (>40 degrees) = **200ft**
 - ☐ Does not apply

☐ 11	Defensible Space
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☐ 11.1	Zone 0: 0 - 5 ft from structures (include supporting images).
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***No stacked firewood, vegetation, vehicles, wood fences, bbq, smoker, or any other combustible fuels.**

Items assessed:	Mitigation recommendations:

☐ 11.2	Zone 1: 5 ft - 30 ft from structure (include supporting images)
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5ft-10ft: Small vegetation, propane tanks up to 125 gallons per C.F.C. Chapter 61 Section 6104.3.
10ft-25ft: Propane tanks between 126 - 500 gallons per C.F.C Chapter 61 Section 6104.3, existing trees trimmed at least 10ft away from chimney and stovepipe outlets, new trees that are fire-resistant, and when the trees drip line at maturity is at least 10ft away.
25ft-30ft: Propane tanks between 501 - 2,000 gallons per C.F.C Chapter 61 Section 6104.3.

*** Combustible fuels such as firewood, RV's, boats, sheds, gazebos, or shrub groupings, shall be relocated into Zone 2. If the following combustible fuels cannot be relocated in Zone 2, than removal or structure hardening is required. See section 13 for details.**

Items assessed:	Mitigation recommendations:

☐ 11.3	Zone 2: 30 ft - 100 ft from structure if applicable (include supporting images).
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30ft-50ft: Firewood, shrub groupings, and new trees not fire resistant; dripline at maturity.
50ft-100ft: ADU's, sheds, structures, RV's, boats, gazebo, propane tanks between 2,001 - 30,000 gallon per C.F.C. Chapter 61 Section 6104.3.
* If the above combustible fuels cannot be relocated into Zone 2, removal or structure hardening is required. See section 13 for details.

Items assessed:	Mitigation recommendations:

☐ 12	Fire & Ember Hardening (Includes Direct Flame Exposure, Radiant Heat & Convection)
(Select between Class 1, 2 or 3 Ignition-Resistant Construction based on sections 12.1 - 12.4)	
☐ 12.1	Class 1 Ignition-Resistant Construction (IWUIC Chapter 5)
The neighboring structure or auxiliary structure separation distance (SSD) is < 30ft or for extreme hazards located in FHSZ.	
☐ 12.2	Class 2 Ignition-Resistant Construction (IWUIC Chapter 5)
The neighboring structure or auxiliary SSD is between 30ft - 50ft or for high hazards located in FHSZ.	
☐ 12.3	Class 3 Ignition-Resistant Construction (IWUIC Chapter 5)
The neighboring structure or auxiliary SSD is between 50ft - 100ft or for moderate hazards located in FHSZ.	
☐ 12.4	Class 1 Ignition-Resistant Construction (IWUIC Chapter 5)
The primary & auxiliary structure does not meet the Minimum Fuel Separation Distance (MFSD) between untreated wildland fuels & structures, based on topography (Natl. Inst. Stand. Technol. Tech. Note 2205, Table B, Page 62, March 2022)	
☐ Flat to mild slope (<20 degrees) = 100ft ☐ Mild to moderate slope (20 - 40 degrees) = 150ft ☐ Moderate to steep slope (>40 degrees) = 200ft ☐ Does not apply	
State Fire Marshal resource: https://calfire.govmotus.org/BMLSearch/Index Fire & Ember Hardening (Start top down)	
Mitigate?	
☐ EE12.5	Roof Assembly: ☐ Yes ☐ No
☐ Class 1: Class A rated roof, space at the eave ends shall be firestopped or have one layer of 72lb mineral-surfaced nonperforated cap sheet, repair damages, plug openings with non-combustible materials, seal gaps, roof valley flashing 26ga. galvanized and corrosion resistant 36-inches wide the entire length over one layer of 72lb mineral-surfaced nonperforated cap sheet, flashing over fascia and thermal barrier under flashing (optional: install a thermal barrier such as stone wool board and ignition-resistant roof tile batten). ☐ Class 2: Class A rated roof, space at the eave ends shall be firestopped or have one layer of cap sheet complying with ASTM D3909, repair damages, plug openings with non-combustible materials, seal gaps, roof valley flashing 26ga. galvanized and corrosion resistant 36-inches wide the entire length over one layer of 72lb mineral-surfaced nonperforated cap sheet, flashing over fascia and thermal barrier under flashing (optional: install a thermal barrier such as stone wool board and ignition-resistant roof tile batten). ☐ Class 3: Same as Class 2. (Class B roof covering, IWUIC section 506.2, prohibited in CA).	
☐ 12.6	Roof Skylights: ☐ Yes ☐ No
☐ Install tempered glass outer pane ☐ Install metal screen if the skylight opens ☐ Metal flashing ☐ No exposed wood.	
☐ 12.7	Solar Panels: ☐ Yes ☐ No
☐ Install 1/8 inch corrosion resistant screen mesh to prevent debris accumulation under the solar panels.	
☐ 12.8	All vents (including makeup air intake): ☐ Yes ☐ No
☐ Ventilation openings shall be fully covered with vents that have been tested in accordance with ASTM E2886. Ventilation openings shall not exceed 144 square inches each. Vents shall be covered with noncombustible corrosion resistant mesh with openings between 1/16 - 1/8 of an inch. ☐ Class 1: Attic ventilation openings shall not be located in soffits, in eave overhangs, between rafters at eaves or in other overhang areas. Gable-end and dormer vents shall be located not less than 10 feet from lot lines. Underfloor ventilation openings shall be located as close to grade as practical. Consider vents with intumescent material and louvers. Dryer vents shall have a metal flapper with no screen. Seal any gaps with fire-rated exterior caulking. ☐ Class 2: Same as Class 1.	

☐ Class 3: Attic ventilation may be installed in soffits, in eave overhangs, between rafters at eaves or in other overhang areas.		
☐ EE12.9 Unvented Attics (C.B.C. T24 Section 1202.3): ☐ Consider for SSD <30ft.	☐ Yes	☐ No
☐ 12.10 Gutters and Downspouts:	☐ Yes	☐ No
For all classes of ignition-resistant construction. ☐ Install metal gutters and downspouts ☐ Metal gutter guards ☐ Metal flashing over fascia ☐ Thermal barrier under flashing ☐ Seal gaps.		
☐ 12.11 Eaves and Soffits:	☐ Yes	☐ No
☐ Class 1: Protect exposed underside with 1hr fire-rated ignition resistant or noncombustible materials directly over exposed wood. Consider enclosing the eaves with noncombustible materials. Attic ventilation openings shall not be located in soffits, eave overhangs, between rafters at eaves or in other overhang areas (IWUIC section 504.10.3). Seal gaps with exterior fire-rated caulking. Consider unvented attic designs per C.B.C. T24 section 1202.3. ☐ Class 2: Protect exposed underside with 1hr fire-rated ignition resistant or noncombustible materials directly over exposed wood. Exposed rafter tails shall not be permitted unless constructed of heavy timber materials (IWUIC section 505.3). Attic ventilation openings shall not be located in soffits, eave overhangs, between rafters at eaves or in other overhang areas (IWUIC section 505.10.3). Seal gaps with exterior fire-rated caulking. ☐ Class 3: Protect exposed underside with 1hr fire-rated ignition resistant or noncombustible materials directly over exposed wood. Exposed rafter tails shall not be permitted unless constructed of heavy timber materials (IWUIC section 505.3). Attic ventilation openings are permitted at the eave or soffit using fire and ember rated vents complying with ASTM E2886.		
☐ EE12.12 Exterior Wall Siding:	☐ Yes	☐ No
☐ Class 1: Constructed with non-combustible or 1hr fire-rated materials. Consider a 2hr fire-rated wall assembly when SSD is <30ft. Install 6-inch metal flashing at the ground, decking & roof intersections. Install thermal barrier between metal siding or flashing to wood sheathing. Seal any gaps with fire-rated exterior caulking. ☐ Class 2: Constructed with one of the following methods: ☐ Materials approved for not less than 1hr fire-rated construction. ☐ Approved noncombustible materials. ☐ Heavy timber or log wall construction. ☐ Fire-retardant treated wood labeled for exterior use. ☐ Ignition-resistant materials. Complying with section 503.2 on the exterior side extending from the top of the foundation to the underside of the roof sheathing. Seal any gaps with fire-rated exterior caulking. ☐ Class 3: Same as Class 2.		
☐ EE12.13 Windows:	☐ Yes	☐ No
☐ Class 1: IWUIC section 504.8 "Exterior windows, window walls and glazed doors, windows within exterior doors, and skylights shall be tempered glass, multilayered glazed panels, glass block or have a fire protection rating of not less than 20 minutes." Consider 1hr+ fire-rated metal framed windows when SSD <30ft or fire-rated operable shutters over existing windows or windows with only a 20 minute fire-rating. Install metal screens on operable windows. Install a thermal barrier between metal framed windows and wood framing. ☐ Class 2: IWUIC section 505.8 "Exterior windows, window walls and glazed doors, windows within exterior doors, and skylights shall be tempered glass, multilayered glazed panels, glass block or have a fire protection rating of not less than 20 minutes." Consider installing fire-rated operable shutters over existing windows or windows with only a 20-minute fire-rating when SSD is between 30ft-50ft. ☐ Class 3: Exterior windows, window walls and glazed doors, windows within exterior doors, and skylights shall be tempered glass, multilayered glazed panels, glass block or have a fire protection rating of not less than 20 minutes.		
☐ EE12.14 Exterior Doors:	☐ Yes	☐ No
☐ Class 1: Exterior doors shall be approved noncombustible construction or have a fire-rating of not less than 1-hour. Install noncombustible threshold and door jamb. Install fire, ember and smoke rated weather stripping. If the door jamb is metal, install a thermal barrier between the metal and wood framing to prevent each transfer,		

especially at the hinges. Seal gaps with fire-rated exterior caulking. ☐ **Class 2:** Exterior doors shall be approved noncombustible construction, solid-core wood not less than 1 3/4 inches thick (45mm), or have a fire-rating of not less than 20 minutes. Windows within doors and glazed doors shall be tempered, multiglazed panels, glass block or have a fire-rating of not less than 20 minutes. Install fire, ember and smoke rated weather stripping. Seal gaps with fire-rated exterior caulking. ☐ **Class 3:** Same as Class 2.

☐ **12.15 Exterior Screen Doors:** ☐ Yes ☐ No

☐ Replace wood screen doors with metal screen door with metal mesh screen material.

☐ **12.16 Garage Doors:** ☐ Yes ☐ No

☐ Exterior garage doors shall resist the intrusion of embers from entering by preventing gaps between doors and door openings, at the bottom, sides and tops of doors, from exceeding 1/8 inch (3.2mm). If the garage door is not metal, install 6 inch metal flashing around the bottom of the door inside and out, within 1/8 inch of the ground, and add fire-rated-gasketing around the garage door.

☐ **12.17 Skirting:** ☐ Yes ☐ No

☐ Install non-combustible or 1hr fire-rated skirting on all sides of spaces under all structures on the parcel.

☐ **12.18 Decks, stairs and landings attached to residence:** ☐ Yes ☐ No

For all classes of ignition-resistant construction: ☐ Replace combustible materials with non-combustible or 1hr fire-rated material, and ☐ the area under the deck, stairs or landing must be maintained with no combustible materials. ☐ Install metal flashing between deck boards at joists.

☐ **12.19 Deck-to-wall intersection:** ☐ Yes ☐ No

☐ Replace combustible siding with non-combustible or 1hr fire-rated siding and ☐ install metal flashing with a thermal barrier such as fiber cement board to prevent heat transfer to protect exposed sheathing.

☐ **12.20 Fence-to-residence:** ☐ Yes ☐ No

☐ Replace wood fence with metal/non-combustible option. ☐ Consider installing a block wall when SSD is <30ft.

☐ **12.21 Retaining Walls:** ☐ Yes ☐ No

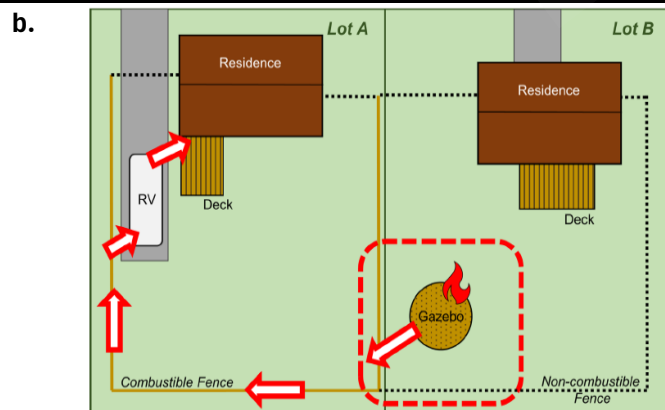
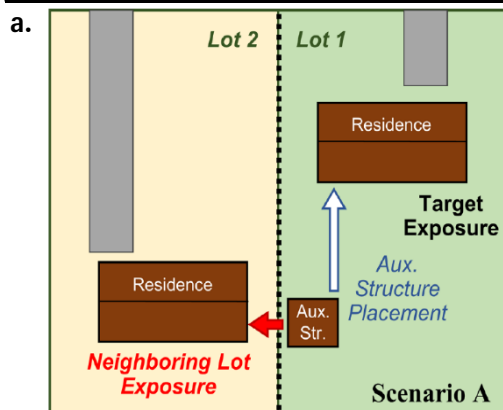
☐ Replace retaining wall length equal to two times retaining wall height with non-combustible material.

☐ **12.22 Combustible Furniture:** ☐ Yes ☐ No

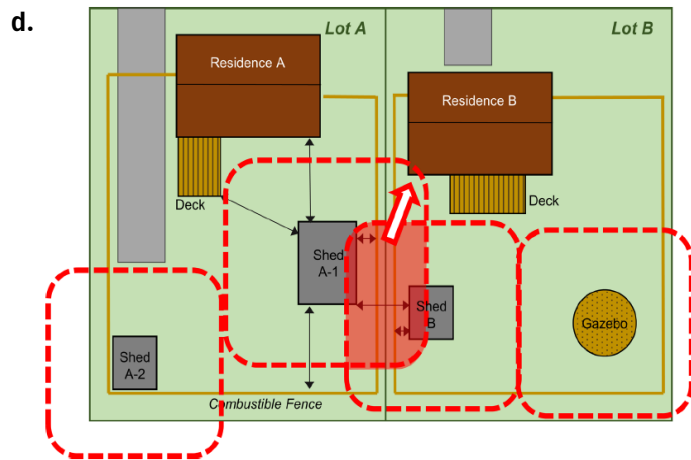
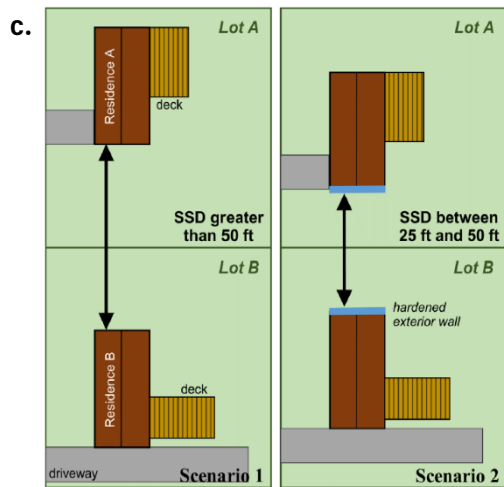
☐ Replace furniture with non-combustible furniture ☐ move to Zone 1 ☐ place cushions indoors when not in use.

☐ **12.23 Other Penetrations:** ☐ Seal around penetrations with exterior fire-rated caulking ☐ Yes ☐ No

Notes:



a. Auxiliary structure exposure b. fire ladder



Figures a. b. c. d. - Natl. Inst. Stand. Technol. Tech. Note 2205 (March 2022)

c. harden the side of the structure exposed d. fuel agglomeration

☐ **13) Overview of Structure & Fuel Separation Distances (Insert an overview of required mitigation)**