AGENDA

Monday, January 6, 2020 – 4:00 to 6:30 pm
Barnes and Sawyer Meeting Rooms – 1300 NW Wall Street, Bend

4:00  Call to Order, review of meeting minutes (December 16)

4:05  Review of recommended WHZ maps, agenda summary

4:10  Existing County land use regulations

4:40  Overview of Deschutes County Wildfire Hazard Code Audit & Other Approaches

5:30  Break

5:45  Roundtable Discussion on possible Land Use Regulations & Approaches

6:30  Adjournment

Next meeting:
Monday, January 13, 2020 – 4:00 to 6:30 PM
Barnes and Sawyer Meeting Rooms – 1300 NW Wall Street, Bend
MEMORANDUM

DATE: December 31, 2019
TO: Wildfire Mitigation Advisory Committee (WMAC)
FROM: Project Management Team
RE: January 6 Meeting Materials and Preparation

The four (4) objectives for the January 6 meeting are to:

1. Update committee members of the Wildfire Hazard Zones and R327.4 implementation maps that will be presented to the Board of County Commissioners (Board) based on the WMAC’s recommendations on December 16, 2019;

2. Inform committee members of the County’s existing wildfire mitigation land use standards; and

3. Introduce possible land use regulatory approaches utilizing the 2015 audit of the County’s development code and current best practices from other jurisdictions; and

4. Invite committee members to share/propose/introduce any additional land use standards for the WMAC’s consideration on January 13.

On January 13 and 27, the WMAC will discuss which land use regulations to recommend to the Board for further consideration to increase wildfire safety throughout the County.

Agenda Items

I. Approval of Meeting Minutes

WMAC members will review minutes for the December 16, 2019 meeting (Attachment 1). Meeting minutes are posted to the project website (www.deschutes.org/wildfirecommittee) after they are approved by the committee.

II. Recommended Wildfire Hazard Zone Maps

During the December 16 meeting, committee members split into two groups to determine where R327.4 should apply based on two different Wildfire Hazard Zone (WHZ) maps:
• Option 1 – based on Community Wildfire Protection Plan Sub-Regions (Attachment 2); and
• Option 2 – Entire County as WHZ (Attachment 4).¹

Attachment 3 depicts the final version of the Option 1 – CWPP map, which limits R327.4 implementation to new lots and replacement dwellings in the Forest Use 1 and 2 and RR-10 zones.

Attachment 5 depicts the Option 2 map, where the entire County is considered a WHZ. The group providing input on this map determined R327.4 should apply to all existing and new lots, with no exceptions based on zoning districts, proximity to Urban Growth Boundaries, or limitations to subdivisions.

Both WHZ maps and corresponding implementation options will be provided to the Board for consideration.

III. Overview Deschutes County Wildfire Hazard Mitigation Land Use Regulations

Existing Requirements

The County currently utilizes several regulatory programs to address wildfire hazards:

• Consistent with state law, such standards are found in the Forest Use 1 and 2 zones and regulate defensible space, access, and water supply. Destination Resorts are also required to incorporate wildfire mitigation standards as part of their master plans and corresponding development. The matrix below describes these requirements in more detail.

• Destination resorts are required to implement a wildfire management plan to ensure safe evacuations and that hazards are minimized.

• The Board declared the County a WHZ in its entirety in 2001, consistent with ORS 93.270(4) in order to require a minimum Class C roofing and to prohibit the use of untreated wood roof coverings.² This was largely in response to home loss in the Awbrey Hall and Skeleton Fires and the fact that many HOA's were requiring cedar shake roofs at the time, leading to increased structural vulnerability to wildfire.

• Defensible space requirements for unprotected lands were adopted in 2011, in Deschutes County Code (DCC) Chapter 8.21.³ Please note, however, these requirements are not the same as land use regulations because the requirements are not triggered as part of a development proposal.

• In October 2016, conditional use permit criteria were applied to Tree Farm, LLC, a cluster development, requiring wildfire mitigation standards including defensible space and residential sprinklers.

¹ WMAC members were offered to participate in three groups: Group 1 – support R327.4 based on CWPP sub-regions; Group 2 – support R327.4 based on entire County as WHZ; Group 3 – do not support R327.4. There were five members in Group 1, six members in Group 2, and no participants in Group 3.
² See Ordinance 2001-024
³ See Ordinance 2011-011
• The Westside Transect Zone, approved in January 2019, requires all land divisions to submit a master plan that contains a wildfire mitigation plan.

IV. Potential New Land Use Regulations and Approaches

The majority of this meeting will focus on introducing potentially new land use regulations and approaches to mitigate wildfire hazards. The PMT will first summarize a 2015 audit (discussed below), and then introduce more recent best practices from other jurisdictions. Wildfire mitigation regulations have rapidly evolved since 2015.

University of Oregon – Natural Hazards Audit

The Planning Division contracted with the University of Oregon’s Community Service Center (CSC) in 2015 to review the Comprehensive Plan and the Zoning code as they pertain to natural hazards. The assessment was limited to wildfire and flooding mitigation standards in Titles 15 (Building and Construction), 18 (County Zoning) and 19 (Bend Urban Area Ordinance). The CSC team worked closely with the County’s Certified Floodplain Manager, County Forester, and Project Wildfire Coordinator. The CSC conducted a national review of model ordinances and best management practices as part of their study. The final report highlighted potential changes to update the zoning code (described in the matrix below). Best practices may have evolved over the past five years; hence the PMT will present recent examples from other jurisdictions among other new approaches for the WMAC’s consideration.

Examples from Other Jurisdictions

Jurisdictions across the nation are acknowledging and addressing the threat wildfire poses to their communities. Land use regulations that mitigate risks associated with development in a Wildland Urban Interface (WUI) are being adopted in response to this threat. Staff has incorporated standards found in such ordinances in the matrix below for the WMAC’s consideration. Several researched ordinances are provided as an attachments.

A roundtable discussion on these and other possible land use standards will follow staff’s summary of the land use regulations matrix. Please come prepared to ask questions about the County’s existing land use regulations, the audit, and new approaches from other communities, as well as to suggest new/other ideas for the WMAC’s consideration.

V. Next Steps

On January 13, the WMAC will begin to discuss and indicate preferences for which land use standards and approaches should be recommended to the Board for further consideration, and where in the County such standards might be applied.

Attachments:

1. Draft December 16, 2019 Meeting Minutes
2. Wildfire Hazard Zone - Option 1 (based on CWPP sub-regions)
3. R327.4 Implementation Map – Option 1
4. Wildfire Hazard Zone – Option 2 (entire County / status quo)
5. R327.4 Implementation Map – Option 2
6. City of Ashland, Development Standards for Wildfire Lands (AMC 18.3.10.100)
7. Jackson County, Wildfire Safety (JCC 8.7)
8. Wasco County, Fire Safety Standards (WCC Chapter 10)
9. Summit County, CO – Wildfire Hazard Areas (SCDC Chapter 3 Zoning Regulations – Section 3202.05)
<table>
<thead>
<tr>
<th>Potential Regulation</th>
<th>Description</th>
<th>Staff Comments</th>
</tr>
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<tbody>
<tr>
<td>Require setbacks from steep slopes and prohibit development on slopes in excess of a 40% grade, where possible.</td>
<td>Establish setbacks (the distance structures must be located) from a maximum slope grade, e.g., 30 foot setback from a slope of 25%. Avoid slopes in excess of 40% grade.</td>
<td>Increased slope equals increased fire behavior (flame lengths, upslope preheating and rates of spread) which could lead to increased structure damage during a fire event. Could allow for development on steep slopes with requirement for defensible space.</td>
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<td>Require defensible space from and around structures.</td>
<td>Establish a defensible space zone (30’ – 200’) around a structure or vacant lot.</td>
<td>According to the CSC report, the most effective way to reduce the risk of structural loss from wildfires is defensible space free from flammable materials. Examples are the OR Defensible Space Law which currently applies to some parcels with the Oregon Department of Forestry Protection District, and Deschutes County Code 8.21 mimics these standards and applies in unprotected areas.</td>
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<td>Require new subdivisions/partitions prepare, adopt, implement, and enforce Wildfire Mitigation Plans.</td>
<td>Such mitigation plans could include road access, building separation, water supply, fire-resistant landscaping, in addition to a mitigation and maintenance plan.</td>
<td>Best practices would require new partitions/subdivisions to adopt standards like NFPA 1141 or 1144. Standards could be required within Title 17, Sections: “Subdivisions”, “Master Developments”, or “Destination Resorts”. A Fire Prevention and Control Plan would ensure that subdivisions have clear plans in place before development. Clear standards and requirements for this plan would assist developers in the project planning process and ensure that maintenance of these standards remain in perpetuity.</td>
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<td>Require new homes to have property specific Wildfire Mitigation Plans.</td>
<td>A wildfire mitigation plan for all new residences to ensure homeowners are mindful of and take an active role in mitigation of risks associated with development within the wildland urban interface (WUI).</td>
<td>Wildfire mitigation plans could include a site plan depicting the location of structures, defensible space management, driveway access for emergency vehicles, water supply for firefighting, and other pertinent information. Note: OSFM has authority over fire access roads, water supply, and installation and spacing of fire hydrants per ORS 476.030 and 476.120.</td>
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<td>Increase standards for road identification signs.</td>
<td>Enhanced protocols regarding road identification signs and addresses can help emergency responders quickly find their destinations.</td>
<td>DCC and the state building code include language to address road identification signs or markers. However, enhanced address and road sign standards could be required.</td>
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4 https://www.oregon.gov/ODF/Fire/Pages/UrbanInterface.aspx
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| **Best Practices from Western Jurisdictions**<sup>5</sup> | Minimum 30 ft. setback to unmanaged lands around structures  
- 4” max dry grass height  
- Trees limbed to 8 ft. off ground (or 50% total tree height)  
- No ladder fuels under tree drip lines  
- No continuous flammable vegetation  
- Flammable vegetation and groundcovers must be 5 ft. away from edge of buildings  
- Well-irrigated or fire-resistant vegetation  
- 10 ft. fuel break from center line of driveway | Flagstaff requires defensible space across the entire property, not simply a set distance from a structure.  
Potential conflicting requirements if fuel break contains riparian areas or wetlands. |

| Establish a prescriptive set of standards to regulate Fire Fuel Breaks (i.e. Defensible Space), similar to the defensible space requirement above, | Gates need to be operable by a single-person and be maintained in operable condition.  
Horizontal clearance through a gate must be a minimum of 14 ft.  
Electric or locked gates must be operable or removable by emergency responders.  
Signs identify no parking areas, mark fire lanes, direct responders to an on-site water source, identify electrical shut-off at power pole, post weight limits on existing bridges/culverts. | Concerns of legibility, repair, enforcements. |

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<sup>5</sup> Staff researched fire safety standards from Ashland, Jackson County, Wasco County, Flagstaff (Arizona), Summit County (Colorado).
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<td>Require Fire Mitigation Plans for all new land divisions (similar to the potential regulation in the CSC Report above).</td>
<td>Required for land divisions: identifies all home sites, building envelopes and access necessary to demonstrate compliance with applicable fire standards.</td>
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<td>Adopt new access standards to both improve the road surface, minimum slope requirements, and turning movements within developments.</td>
<td>Driveway standards shall be made of an all-weather surface capable of supporting a minimum vehicle gross weight, maintain minimum widths and turnaround options. Slope shall not exceed 10% on straight sections / 5% on turnarounds or curves. Requires inspection/approval by County Road Dept.</td>
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<td>Adopt standards for new developments on unprotected Lands, i.e., properties not in a fire district.</td>
<td>New residential developments required to be located in a fire district, annex into one, or provide fire mitigation plan.</td>
<td>Note: OSFM has authority over fire access roads, water supply, and installation and spacing of fire hydrants per ORS 476.030 and 476.120.</td>
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<td>Require a fuels reduction plan, similar to the Wildfire Mitigation Plans and defensible space concepts above.</td>
<td>Required as part of application for development in wildfire hazard area. Must include schedule and timetable for vegetation removal and thinning.</td>
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<td>Adopt new requirements that mandate on-site water supply.</td>
<td>On-site water supply required in certain circumstances to fight nearby wildfire threat.</td>
<td>Note: OSFM has authority over fire access roads, water supply, and installation and spacing of fire hydrants per ORS 476.030 and 476.120.</td>
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<td>Update the County's fencing standards to mitigate wildfire hazards.</td>
<td>Where fencing is attached to a building/deck, it shall be made of noncombustible materials within 5 ft. of the connection to the structure.</td>
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DRAFT MINUTES

Monday, December 16, 2019 – 4:00 to 6:30 pm
Barnes and Sawyer Meeting Rooms – 1300 NW Wall Street, Bend

Call to order, approval of meeting minutes, agenda summary & prior meeting follow-up

Members Present:
Brent Landels – Remax Realtor
Brian Braddock – Farmers Insurance (Retired)
Geoffrey Reynolds – Home Owner
Jim Figurski – Landscape Architect
Jim Beeger – Planning Commissioner
Jodie (Joe) Foran – Fuels Management (BLM Retired)
Karna Gustafson – Central Oregon Builders Association
Ken Kehmna – Redmond Fire and Rescue
Tyler Neese – Central Oregon Realtors Association
Roger Johnson, Sisters-Camp Sherman Fire District

Matt Van Coutren – Hayden Homes

Deschutes County Staff Present:
Nick Lelack, Community Development Director
Chris Gracia, Assistant Building Official
Zechariah Heck, Associate Planner
Ed Keith, County Forester
Tim Berg, Applications Systems Analyst III
Ines Curland, Applications Systems Analyst I
Ashley Williams, Administrative Assistant

Other Agency Staff:
Patrick Davenport, City of Sisters
Doug Green, Bend Fire Department

Nick Lelack said that the November 4th, November 18th, and December 2nd minutes are up for approval.

Roger moved to approve the minutes, Ken seconded. Jim Beeger presented changes to the November 2nd and November 16th minutes attendance list. The motion was unanimous.

Nick Lelack summarized the events of the December 2nd meeting and the agenda for tonight. He said that tonight members will split into three groups to work through the Decision Matrix. There would be one group for each of the two maps, and the third group would be for members completely opposed to R327. Once the groups have met each will give a presentation about their results.
The Committee reviewed new cost estimates provided by Matt and Karna for fire hardening costs. Doug also provided some cost estimates that he received at a conference earlier this month. There were clarifications provided from members and staff about Simplicity Homes relationship to Hayden homes; window requirements per R327; and what kinds of qualities (decks, foundations, etc.) were build standard with various Pahlisch homes.

Zech explained the differences between the two maps provided. He said that one map is where the Fire Hazard Area is defined throughout the entire county and the other has boundaries defined by the CWPPs (Community Wildfire Protection Plans) throughout the County. There was discussion about federally owned land and land inventory. Tim said that a complete buildable land inventory was impossible due to time and data constrictions.

Karna recommended that there only be two groups, one for each map, rather than three. She made this recommendation based on the knowledgeability a member would obtain by helping develop a map. Nick said that staff did not want to force any members into a role they were uncomfortable with. There was consensus to have two groups rather than three.

Nick concluded by saying that the end result of this process is that two recommendations would be forwarded to the Board of County Commissioners, one for each map.

**Break out into groups to work through decision matrix**

The Committee split into two groups to discuss their proposals for each map. The summary of each groups discussions are provided below. The group members were as follows:

**CWPP (Community Wildfire Protection Plan) Boundary Map** – Karna Gustafson, Brent Landles, Matt Van Coutren, Jodie (Joe) Foran and Tyler Neese.

**Entire County Map** – Brian Braddock, Geoffrey Reynolds, Jim Figurski, Jim Beeger, Ken Kehmna, and Roger Johnson.

**Group Presentations**

Karna presented for Group One. She said that the group started by using UGBs (Urban Growth Boundaries) from each City, as well as borders from unincorporated community. During that discussion she said that the group decided that all new lots and replacement dwellings within 2 miles of those boundaries would be subject to the regulations. Additionally, all new roofs (more than 50% threshold) should also be fire hardened. She said that the group realized that this method had potential short comings since UGB boundaries are subject to change. They resolved this issue by deciding to use specific zone designations rather than UGB boundaries. The zones where fire hardening would be required are: RR10, F1 and F2.
Jim F presented for Group 2. He said that the group came to consensus quickly that using UGBs was going to be meaningless. As a result the group concluded to apply fire hardening to all lots and all zones. He said that they considered exemption from fire hardening in the Resource Zones (EFU and Forest), but quickly realized that these areas were also hazardous. He said that the idea of having boundaries became too complicated to enforce.

**Next Steps**

Nick said that we will bring the updated map from Group 1 to the group for review, but that both maps would be forwarded to the Board of County Commissioners for review and decision. He said that the next two committee meetings will cover Land Use regulations. Brent requested that the Group 1 map have the matching grey areas to the Group 2 map. Staff said they would add this feature.

**Adjournment**

*Next meeting:*
Monday, January 6, 2019 – 4:00 to 6:30 pm
Barnes and Sawyer Meeting Rooms – 1300 NW Wall Street, Bend
Wildfire Mitigation Advisory Committee
R327.4 - Option 1

Implementation Area (F1, F2 & RR10 Zone)

* Would only apply to replacement dwellings or dwellings permitted on newly created parcels.
  Excludes subdivisions more than 50% built out.
**Proposed Wildfire Hazard Zone**

*As proposed, there would be no change to the county's Wildfire Hazard Zone. See Ordinance 2001-024.*

**Disclaimer:**
The information on this map was derived from digital databases on Deschutes County's GIS. Care was taken in the creation of this map, but it is provided "as is". Deschutes County cannot accept any responsibility for errors, omissions, or positional accuracy in the digital data or the underlying records. There are no warranties, express or implied, including the warranty of merchantability or fitness for a particular purpose, accompanying this product. However, notification of any errors will be appreciated.

December 31, 2019

File: N:\Custom\County\GIS\WildfireRiskAssessment
18.3.10.100 Development Standards for Wildfire Lands

It is the purpose of the development standards for Wildfire Lands to provide supplementary development regulations to underlying zones to reduce or minimize the potential impacts of wildfire on properties, the occupants of properties and the occupants of adjacent properties. These standards function to balance the need to preserve natural habitat, prevent erosion, provide for aesthetic and functional landscaping, and to facilitate access to manmade structures by firefighters in the event of a wildfire.

A. Requirements for Subdivisions, Performance Standards Developments, Site Design Review or Partitions.

1. Applicability. A Fire Prevention and Control Plan shall be required with the submission of any application for an outline plan approval of a Performance Standards development, preliminary plat of a subdivision, land partition, Commercial Site Design Review increasing a building's footprint by 200 square feet or greater, or Residential Site Design Review for developments of three units or greater.

2. Plan Submission Requirements. The Fire Prevention and Control Plan, prepared at the same scale as the development plans, shall address the General Fuel Modification Area requirements outlined in subsection 18.3.10.100.B and include the submission materials listed below. The Staff Advisor may waive a plan submittal requirement if the Staff Advisor determines it is not reasonably necessary in order to make a decision on the application.

   a. The location and dimensions of all existing and proposed structures, parking areas and driveways on the property.

   b. The location, dimension, and grade of fire apparatus access roads and driveways serving all structures on the property.

   c. The location and dimensions of all structures upon adjoining properties located within 30 feet of a shared property line.

   d. The location of all existing and proposed fire hydrants.

   e. Site contours showing two-foot intervals detailing elevation and slope.
f. A tree and vegetation management plan showing:

   i. Areas where shrubs and bushes will be removed including a description of the species and size;

   ii. Areas where trees will be removed to reduce interlocking tree canopies including a description of the species and diameter at breast height (DBH);

   iii. New trees, shrubs and bushes to be planted including the species, location and size at maturity;

   iv. Significant trees to be retained.

g. The location of and information addressing required General Fuel Modification Area setback areas as described in subsection 18.3.10.100.B.

h. A schedule and timetable for vegetation removal and thinning shall be included in the Fire Prevention and Control Plan. An exception to the implementation schedule may be granted by the Fire Code Official.

3. Approval Criteria. The hearing authority, in consultation with the Fire Code Official, shall approve the Fire Prevention and Control Plan upon demonstration of compliance with the standards required by this chapter.

   a. In order to meet the purpose and standards of this chapter the hearing authority, in consultation with the Fire Code Official, may require the following through the imposition of conditions attached to the approval:

      i. Delineation of areas of heavy vegetation to be thinned and a formal plan for such thinning.

      ii. Clearing of sufficient vegetation to reduce fuel load.

      iii. Removal of all dead and dying trees.

      iv. Relocation of proposed structures and roads to reduce the risks of wildfire and improve the chances of successful fire suppression.

      v. Preservation or planting a sufficient number of trees and plants for erosion prevention and enhancement of water resources.
4. **Fire Prevention and Control Plan Maintenance.** The property owner of a lot, or homeowners' association for areas held in common, shall be responsible for maintaining the property in accord with the requirements of the Fire Prevention and Control Plan approved by the hearing authority.

   a. Provisions for the maintenance of a required Fire Prevention and Control Plan shall be included in the covenants, conditions and restrictions for the development, or otherwise recorded in the Jackson County real property records, and the City shall be named as a beneficiary of such covenants, restrictions, and conditions.

B. **Requirements for Construction of All Buildings and Decks.**

1. **Applicability.** A “fuel modification area” is defined as an area either natural or manmade, where material capable of allowing a fire to spread unchecked has been treated, cleared or modified to slow the rate and intensity of an advancing wildfire and to create an area for fire suppression operations. Establishment of a fuel modification area does not involve stripping the ground of all native vegetation. A fuel modification area shall be required for the following construction:

   a. All new buildings located on a vacant lot, that increase lot coverage by 200 square feet or greater, shall have a General Fuel Modification Area covering the full extent of the property.

   b. Decks, additions to existing buildings, and detached accessory structures which increase lot coverage by 200 square feet or greater, shall have a General Fuel Modification Area extending 30 feet from the furthest extent of the addition, deck, or accessory structure, or to the property line, whichever is less.

2. **General Fuel Modification Area Standards.** To reduce fire spread both from and to structures on the property, and to adjoining properties, the establishment and maintenance of a fuel modification area requires the following:

   a. All standing dead and dying vegetation shall be removed from the property, except when considered ecologically beneficial.

   b. Newly planted vegetation within 30 feet of any building or deck shall not include species listed on the City's Prohibited Flammable Plant List. This setback distance shall...
be increased by ten feet for each ten percent increase in the average slope of the property over ten percent.

c. Within five feet of a new building, addition, or deck, existing vegetation listed on the City's Prohibited Flammable Plant List shall be removed, with the exceptions of significant trees as defined in part 18.6.

d. Within five feet of a new building, addition, or deck, combustible manmade and natural materials are prohibited, including but not limited to bark mulch, stored wood, and accumulation of dry leaves and needles, except when permitted as follows:

   i. Combustible materials may be permitted within five feet of a structure when the Staff Advisor, in consultation with the Fire Code Official, has determined the portion of the structure adjoining the combustible material is constructed with ignition-resistant building materials sufficient to reduce the spread of fire from the combustible materials.

e. Existing trees which are identified on the City's Prohibited Flammable Plant List shall be maintained to provide a clearance from new structures and additions, as follows:

   i. Ten feet horizontal clearance from a chimney outlet. At no time shall tree crowns or limbs extend into the vertical plane of a chimney outlet.

   ii. Ten feet above the roof of a new building or addition.

   iii. Ten feet from the furthest extension of a new building or addition or deck.

   iv. In circumstances where pruning a tree to meet the clearance from structures requirements of subsections 18.3.10.100.B.2.e-i-iii would compromise the health and survival of existing trees, the Staff Advisor may modify those requirements, but at a minimum the trees shall be pruned to maintain a ground clearance consistent with subsection 18.3.10.100.B.2.i.

f. Canopy spacing of the outermost limbs of trees on the City's Prohibited Flammable Plant List shall be separated by at least ten feet at mature size.
i. Groups of trees in immediate proximity to each other may be considered as one tree canopy when approved by the Staff Advisor in consultation with the Fire Code Official.

ii. Canopy spacing requirements do not apply to significant trees, as defined in part 18.6, or trees that are not listed on the City's Prohibited Flammable Plant List.

g. Fire resistant trees, those not listed on the City's Prohibited Flammable Plant List, shall be maintained to provide clearance from structures as follows:

i. Ten feet horizontal clearance from a chimney outlet. At no time shall tree crowns or limbs extend into the vertical plane of a chimney outlet.

ii. Tree limbs shall be pruned to ensure they do not touch any part of a structure including but not limited to roofs, eaves, and decks.

h. Existing trees which are identified on the City's Prohibited Flammable Plant List shall be pruned to provide a ground clearance of a minimum eight feet above the ground, or one-third of the tree height, whichever is less.

i. Existing shrubs which are identified on the City's Prohibited Flammable Plant List shall be maintained to provide a clearance from new structures and other flammable vegetation as follows:

i. Five feet clearance from the furthest extension of a new building, addition or deck.

ii. Separation from other listed flammable shrubs within the General Fuel Modification Area shall be a minimum of two times the shrub's height at maturity.

j. Newly planted shrubs which are identified on the City's Prohibited Flammable Plant List shall be:

i. A minimum of 30 feet from the furthest extension of any building, addition or deck.

ii. Separated from other listed flammable shrubs by a minimum of two times the shrub's height at maturity.
iii. Located outside of the drip line of a tree which is listed on the City’s Prohibited Flammable Plant List.

k. The vertical clearance between the top of understory vegetation within the drip line of a tree and the lowest tree limbs shall be at least three times the height of vegetation where either the tree or vegetation is listed on the City's Prohibited Flammable Plant List.

l. Where necessary for erosion control, slope stability, riparian and wetland preservation and enhancement, performing functions considered beneficial in water resource protection, or aesthetic purposes, existing vegetation may be allowed to be retained consistent with an approved Fire Prevention and Control Plan, or upon written approval of the Staff Advisor in consultation with the Fire Code Official.

m. Fuel modification in areas which are also classified as Hillside Lands or Water Resource Protection Zones shall be included in the erosion control measures outlined in section 18.3.10.090, Development Standards for Hillside Lands, and management plan for water resource protection zones in section 18.3.11.110.

n. The General Fuel Modification Area standards outlined in subsection 18.3.10.100.B.2 may be reduced or waived when approved by the Staff Advisor in consultation with the Fire Code Official, provided it is demonstrated that the fire risk has been reasonably reduced such as in cases where ignition-resistant materials and construction methods, or vegetation type and separation, function to enhance the structure’s protection from exterior wildfire exposure.

3. Roofing. Where 50 percent or more of a structure’s roof area is replaced within a five-year period, the roof covering shall be constructed or reroofed with a Class B or better roof covering.

4. Fencing. Where fencing is attached to a building or deck, the fencing shall be made of noncombustible materials within five feet of the connection to the structure in compliance with the requirements in section 18.4.4.060.

C. Implementation.

1. For lands required to comply with subsection 18.3.10.100.A that have been partitioned, subdivided or received Site Design Review, all requirements of the Fire Prevention and
Control Plan shall be complied with prior to bringing combustible materials onto the property.

2. The Fire Prevention and Control Plan must be implemented during installation of public or private utilities and site improvements required of a subdivision, partition, Site Design Review or Performance Standards development, and shall be considered part of the applicant’s obligations for land development.

   a. The plan shall be implemented prior to final plat approval for lots created by partitions and for subdivisions or Performance Standards developments not requiring public improvements. The Fire Code Official, or designee, shall inspect and approve the implementation of the Fire Prevention and Control Plan and provide written notice to the Staff Advisor that the plan was completed as approved by the hearing authority, or as amended in accordance with subsection 18.3.10.100.D.

   b. Final inspection of requisite fuel modification areas will be conducted prior to bringing combustible materials onto the property to verify compliance with the fuel reduction standards set forth in subsection 18.3.10.100.B.

3. For construction of buildings and decks requiring a General Fuel Modification Area, the establishment of the fuel modification area provided for in subsection 18.3.10.100.B shall be completed before bringing combustible materials onto the property. Upon completion of the construction, all General Fuel Modification Area tree and shrub clearance standards shall be verified. The property owner, or subsequent property owners, shall be responsible for maintaining the property in accord with the General Fuel Modification Area standards as defined in subsection 18.3.10.100.B.2.

D. Minor Amendments. Changes to a previously approved Fire Prevention and Control Plan are subject to ministerial approval by the Staff Advisor, with written concurrence from the Fire Code Official, when it is demonstrated that the proposed amendments do not constitute an increased risk to the spread of wildfire.

   1. Minor amendments to an approved Fire Prevention and Control Plan include the following:

      a. A change in the implementation schedule provided within an approved Fire Prevention and Control Plan.
b. A delay in the implementation of required fuels reduction in consideration of weather conditions, and fire hazard potential, during the period of construction.

c. The retention of existing non-fire-resistant trees or shrubs, or planting of new non-fire-resistant trees or shrubs, within 30 feet of a structure.

d. A reduction of the requisite fuel modification area to address observed field conditions including preservation of riparian, wetland, and slope stabilizing vegetation.

e. A reduction of the requisite fuel modification area in recognition of the use of fire-resistant materials and construction methods that function to provide the structure with reduced exterior wildfire exposure.

f. A change in the Fire Prevention and Control Plan that results in a tree canopy separation of less than ten feet between the outermost limbs of trees which are identified on the City’s Prohibited Flammable Plant List.

g. The temporary storage of combustible materials on a property prior to completion of a Fire Prevention and Control Plan or establishment of a required fuel modification area.

h. A reduction of the spacing between the top of the understory vegetation and the lowest tree limbs not meeting the requirements of subsection 18.3.10.100.B.2.

E. Exceptions to a Fire Prevention and Control Plan and General Fuel Modification Area Standards. The approval authority may approve exceptions to the Development Standards for Wildfire Lands to meet the purpose of this chapter subject to approval through a Type I procedure for the following:

1. An action prescribed by this section that includes the removal of trees designated to be retained as part of an approved planning action.

2. A change that includes the removal of native vegetation within a Water Resources Protection Zone.

3. A change in the Fire Prevention and Control Plan not specifically listed as a minor amendment under subsection 18.3.10.100.D.1.
4. Tree removal on C-1, C-1-D, E-1, CM, M-1, HC, R-2, R-3, and NN-2 zoned properties subject to Tree Removal Permit requirements set forth in chapter 18.5.7. (Ord. 3158 § 1, replaced, 09/18/2018)

The Ashland Land Use Ordinance is current through Ordinance 3168, passed December 18, 2018.

Disclaimer: The City Recorder’s office has the official version of the Ashland Land Use Ordinance. Users should contact the City Recorder’s office for ordinances passed subsequent to the ordinance cited above.

City Website: www.ashland.or.us
City Telephone: (541) 488-5307
Code Publishing Company
8.6.5 Reduction of Riparian Setbacks
Riparian setbacks and areas for retention of vegetation and tree cover may be reduced by up to 25 percent if an applicant demonstrates through a Type 2 review either of the following:

A) The setbacks required by Section 8.6.1 will render the parcel unbuildable; or

B) Equal or better protection will be ensured through restoration of riparian areas, enhanced buffer treatment, or similar measures. An application under this provision must include the recommendation of the Oregon Department of Fish and Wildlife (ODFW) that the habitat is adequately protected even if the setback is reduced. As part of any such determination, the applicant must submit materials describing what measures designed to mitigate adverse impacts on riparian habitat will be implemented, along with an ODFW approved map showing existing and proposed vegetation (tree type and location, understory type), structure location, and stream bank description.

8.7 WILDFIRE SAFETY

8.7.1 Fire Safety Requirements

A) Applicability
This Section contains mandatory standards for all new and existing structures not exempted through Section 8.7.2 located in areas subject to wildfire hazard as identified on the “Hazardous Wildfire Area Map.” The official version of the “Hazardous Wildfire Area Map” will be maintained by the Planning Division. (OAR 660-006-0035, 40). Compliance with the standards of this section will be verified through a Fire Safety Inspection as coordinated through Jackson County Development Services and shall occur prior to issuance of building permits.

B) Fuelbreaks
A minimum 100-foot fuelbreak will be developed and maintained around all new structures in areas identified on the “Hazardous Wildfire Area Map.”

A fuelbreak may be extended onto an adjoining property with a recorded fuelbreak easement. The 100-foot fuelbreak will not be applied on the side of a property that abuts a county, state or federally improved and...
maintained road right-of-way, but a minimum 100-foot fuelbreak will still be required on the other sides. Additionally, the 100-foot fuelbreak will not be applied on the side of the property that abuts an improved local access road, approved private road, or a private access easement when the accessway is maintained through an enforceable written agreement between property owners served by the accessway and the fuelbreak complies with the requirements of 8.7.1(D).

In accordance with Section 8.6.4, no riparian habitat may be removed in order to comply with this section. Where the required fuelbreak is located within a protected riparian area, a fuelbreak reduction will be required for that portion of the required fuelbreak.

All proposed structures will meet the minimum structural setback requirements. A fuelbreak is measured from a structure’s outermost walls, combustible decks, or other combustible attachments. Fuelbreaks will meet the following standards:

1) **Primary Fuelbreak**
The goal within the primary fuelbreak is to remove fuels that will produce flame lengths in excess of one (1) foot. A minimum 50-foot primary fuelbreak is required for all lands identified as a wildfire hazard. Vegetation within the primary fuelbreak may include grass maintained at less than six (6) inches in height and low fuel volume, fire resistant shrubs. Highly combustible shrubbery, such as juniper, is prohibited. Trees will be horizontally spaced with more than 15 feet between the trunks, and will be pruned to remove branches that are dead or that are less than 10 vertical feet above the ground. A 10 foot clearance between branches and stove pipes or chimney outlets must be maintained. Deciduous tree branches must be no closer than 10 feet from the roof; evergreen branches must be no closer the 25 feet from the roof. Accumulated leaves, needles, limbs and other dead vegetation must be removed. Flammable groundcover materials (e.g., bark mulch) may not be used in landscaping within 12 inches of buildings. Firewood piles, slash piles, and woodsheds will be placed at least 30 feet from all structures.

2) **Secondary Fuelbreak**
The goal of the secondary fuelbreak is to reduce fuels so that the overall intensity of a wildfire will be lessened and the likelihood of crown fires and crowning is reduced. A minimum 50 foot secondary fuelbreak is required which extends in all directions around the primary fuelbreak. An additional 50 feet, for a total of 100 feet, will be added to the secondary fuelbreak when the natural slope of the area within 100 feet of the proposed structure exceeds 20 percent. This additional 50 feet will be added to the area below and to each side of the proposed structure. Trees will be spaced with more than 15
horizontal feet between the trunks, and will be pruned to remove branches that are dead or that are less than 10 vertical feet above the ground. Ornamental and fruit trees are excluded from the spacing standards, provided they are kept green and free of dead material. Small trees and brush growing underneath larger trees should be removed. Dead plant material must be removed, which includes pruning dead branches from trees and shrubs. Understory vegetation may include grass or groundcover maintained at less than 12 inches in height and low fuel volume, fire resistant shrubs (see the User's Guide for drought and fire resistant landscape materials).

C) **Roof Coverings**
All structures will have Class A or B roofing according to the International Building Code for commercial structures, and State of Oregon Structural Specialty Code for residential structures. This prohibits wood roofing of any type, including pressure treated wood shingle or shakes.

When 50 percent or more of the roof covering of any building is repaired or replaced within one (1) year, the entire roof covering will be made to comply with the requirements for roof coverings for new structures within wildfire hazard zones.

D) **Access**
For purposes of public safety, access will be constructed to the standards of Section 9.5.3, 9.5.4, or 9.5.5 whichever is applicable. A fuelbreak shall be required along private accessways including driveways, private roads, and private access easements in accordance with Section 8.7.1(B)(1) except that the fuelbreak shall be allowed to be a minimum of 22 feet in width, which includes the driving surface. If the property line or an easement boundary used for driveway access purposes is within 5 feet of the edge of the driveway surface, the fuelbreak need only be developed within the property or access easement.

E) **Chimneys**
All chimneys will have a spark arrester.

F) **Rural Fire Protection**
Dwellings will be located within a rural fire protection district or contract with a rural fire protection district for residential fire protection. If the dwelling is not within a rural fire protection district and contracting is not possible, evidence will be provided to show that the applicant has asked to be included in the nearest such district, and that said district cannot or has refused to provide protection.

G) **General Fire Safety Guidelines**
The following fire safety guidelines are suggested in all rural and forested areas, and may be required by the County when a finding is made that such measures are necessary to protect public safety (see OAR 660-006-0035 for additional standards in forest zones):
1) Bridges constructed of noncombustible materials or as otherwise approved by the local fire official having jurisdiction through a Type 1 Review;

2) On-site water storage approved by the fire district serving the proposed use;

3) Permanent signs posted along the access route to indicate the location of the emergency water source; and

4) Other measures as recommended by the fire agency commenting on the application or the County Fire Safety Inspector.

H) **Address Signs**
Address signs will be posted where the driveway, private access easement, and private road intersects with the public right-of-way in such a manner as to be visible from both directions on the roadway providing the access. Directional address signs must also be posted at all road/driveway junctions.

### 8.7.2 Exemptions to the Wildfire Safety Requirements

A) Interior remodels are exempt from the wildfire safety requirements of this section.

B) Existing structures that have been lawfully constructed and were in compliance with the permit and regulations in effect at the time of construction are exempt from the fuelbreak distance requirements of Section 8.7.1(B) and may be expanded or replaced within a lawful non-conforming fuelbreak if:

1) The expansion/replacement is less than 50% of the square footage of the existing originally approved and constructed building floor plan or 1,000 square feet whichever is less; and

2) Any expansion/replacement is not placed further inside a lawful non-conforming fuelbreak than what currently exists.

C) Non-habitable structures less than 400 square feet in size, which are not located in a forest zoning district, are exempt from the wildfire safety requirements of this section.

D) Transmission and Utility Towers, which are not located in a forest zoning district, are exempt from the wildfire safety requirements of this section.

E) The fire district having jurisdiction or the Oregon Department of Forestry (ODF) if not in a fire district may authorize or make the determination that existing trees can remain if it is found that they do not pose a significant wildfire hazard.

### 8.7.3 Fuelbreak Reductions
The County, upon receipt of a written authorization from the fire district having jurisdiction, or the Oregon Department of Forestry (ODF) if not in a fire district, shall approve a reduction in the width of the fuelbreak as prescribed by the
agency. The written authorization will be made on forms supplied by the County and be signed by the Fire Chief or an ODF official with authority to make fuelbreak reduction decisions, or their designee. Such authorizations will be processed as a Type 1 permit. Authorization to reduce the fuelbreak requirement will not, however, release an applicant from compliance with any other applicable standard of this Ordinance.

When a Type 1 fuelbreak reduction for a structure is not authorized by a fire district or ODF official, a fuelbreak reduction may be approved by the County under a Type 2 review when the applicant documents, and the County confirms through a site inspection, that one or more of the following conditions affect development of the proposed use:

A) A stream or irrigation canal, road, topographic feature, or other site characteristic serves as an adequate fuelbreak;

B) A better fire suppression and prevention strategy is proposed by the applicant; or

C) Because of parcel or lot configuration, a portion of the fuelbreak would be located on an adjoining property, and an adjustment of the building site is not practicable.

8.7.4 Conditional Approval Requirements When Deemed Necessary
Except where superseded by existing non-conforming situations as outlined in Section 8.7.2, the County's decision to authorize a fuelbreak reduction or approve a fire safety inspection will consider the advice of the fire protection district, County Fire Safety Inspector or ODF official to assure compliance with these regulations. Any adjustment to these requirements will be processed through a Variance as stipulated in Section 3.11 of the Land Development Ordinance.

8.8 STORMWATER MANAGEMENT

8.8.1 Purpose
Managing stormwater is an essential part of maintaining livability in urban areas. Typical urban development often interferes with the hydrologic process of rain filtering through the soil, recharging the groundwater, and slowly reaching the nearby streams. Most rooftops, parking lots, roadways and other impervious surfaces collect stormwater runoff from developed areas, often increasing the temperature and amount of pollutants, and quickly discharge the flow to the closest water body. Provisions within the Clean Water Act require the County to limit stormwater pollution sources. As such, the County is a Designated Management Agency (DMA) under the Rogue Basin Water Quality Implementation Plan and is responsible for reducing pollutant loads transported to surface waters from runoff.

8.8.2 Applicability
In order to ensure the health of the Rogue Basin Watershed, developments within the Rogue Valley Sewer Services (RVS) Phase II boundary or those that require an approved Stormwater Pollution Control Plan and National Pollutant Discharge Elimination System (NPDES) permit are required to meet the development standards of Section 8.8.3 below.
CHAPTER 10 - FIRE SAFETY STANDARDS

Section 10.010 - Purpose of Fire Safety Standards

A. To inform and notify rural residents that fire protection services are limited or nonexistent through much of Wasco County.

B. Encourage residents to become familiar with the structural fire protection district that will respond to their property (if there is one).

C. To notify them that the volunteer fire protection districts can only serve if they have sufficient trained volunteers to meet demands. Please consider volunteering.

D. To reduce threats to life, safety, property, and resources by improving access to and defensibility of development in rural areas.

E. To educate current and future property owners about fire safety standards and regulate fire standards in a manner that decreases review process where possible while communicating requirements as clearly as possible.

F. To provide flexibility where necessary by providing for a review process that will allow modifications to fire safety standards where necessary with comment and recommendations from emergency responders.

G. To establish consistency between standards currently listed in various zones, Oregon Department of Forestry regulations, and best available science.

Section 10.020 - Applicability of Fire Safety Standards

A. Applicability of Fire Safety Standards in Different Rural Zones: County Ordinances affect all rural zones (all zones outside an Urban Growth Boundary). All rural zones are subject to fire standards but the applicability of the specific standards varies by zone and by use
Zoning terms used to classify groups of land use designations in the Fire Safety Standard Checklist, Sections 10.110 to 10.150, are defined in the following table (any more specific distinctions based on parcel shape or specific zoning designation are also called out in the checklist):

<table>
<thead>
<tr>
<th>Zoning Classifications Referred to in the Fire Safety Standards Checklist, Sections 10.110-10.150</th>
<th>Zones</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Zones - All rural zones anywhere outside an adopted Urban Growth Boundary</td>
<td>R-2, R-C, R-I, A-R, RC-TV, RC-Wamic</td>
</tr>
<tr>
<td>Exception Areas and Smaller Lot Residential - Exception areas with smaller lot residential, rural commercial, rural industrial, or rural community land use designations.</td>
<td>FF-10, RR-10, RR-5, A-1 (160), A-1 (40), F-1 &amp; F-2</td>
</tr>
<tr>
<td>Resource Zones and Large Lot Residential - Resource or recreation zones and rural residential areas with larger minimum lot sizes.</td>
<td></td>
</tr>
</tbody>
</table>

Please also work with the County Planning Department if you are permitting only an accessory structure or replacing or adding onto an existing home, commercial, or industrial structure and they will help you determine which standards apply to that specific type of land use in accordance with (B) below.

B. Applicability of Fire Standards to Different Types of Land Uses

1. Zones affected by Fire Standards
   Fire standards are applicable in all rural zones, but different standards may apply in different types of zones. The applicability of fire standards by zone is discussed in (A) above and noted in the fire safety standards checklist below, Sections 10.110 to 10.150. The checklist also highlights any specific differences in the applicability of the standard due to size of lot or specific zoning.

2. Uses affected by Fire Standards
   Some fire standards are applicable only to new dwellings while others are applicable to all kinds of structures and alterations to structures. The following table lists the fire safety standards applicable to different types of development.

<table>
<thead>
<tr>
<th>Land Use Type</th>
<th>Siting</th>
<th>Defensible Space</th>
<th>Construction Standards</th>
<th>Access</th>
<th>Other</th>
</tr>
</thead>
</table>
| All New Dwellings and Rural Commercial or Rural Industrial Buildings, Conditional Use Permit, Subject to Standards, Site Plan Review, and Permitted Dwellings | (A) Avoid slopes > 40%  
  (B) Set back from top of slopes > 30% | (A) Fire fuel break  
  (B) Minimum of 50 feet to unmanaged lands around structures | (A.1) Roofing  
  (A.2) Spark Arresters  
  (B.1) Clear Clean & Protected Decks, (B.2) Screened Exterior Openings  
  (B.3) Overhanging trees  
  (B.4) Utilities  
  (B.5) Stand Pipe | (A) Improved Surface & Minimum Driveway widths  
  (B) Turn Radius, Maximum Slopes, & Pull Outs  
  (C) Physical Clearance & Fire Fuel Breaks on Driveways  
  (D) Turnarounds  
  (E) Bridges & Culverts  
  (F) Gates  
  (G) Signs  
  (H) Roads to the property | Structural Fire Protection Required |
| Relocated Dwellings (Replacement in a new location) | (A) Avoid slopes > 40%  
(B) Set back from top of slopes > 30%  
| (A) Fire fuel break  
(B) Minimum of 50 feet to unmanaged lands around structures  
| (A.1) Roofing  
(A.2) Spark Arresters  
(B.1) Clear Clean & Protected Decks, (B.2) Screened Exterior Openings  
(B.3) Overhanging trees  
(B.4) Utilities  
(B.5) Stand Pipe  
| (A) Improved Surface & Minimum Driveway widths  
(B) Turn Radius, Maximum Slopes, & Pull Outs  
(C) Physical Clearance & Fire Fuel Breaks on Driveways  
(D) Turnarounds  
(E) Bridges & Culverts  
(F) Gates  
(G) Signs  
| Replacement Dwellings (In Kind same size/same location) | (A) Fire fuel break  
(B) Minimum of 50 feet to unmanaged lands around structures  
| (A.1) Roofing  
(A.2) Spark Arresters  
(B.1) Clear Clean & Protected Decks, (B.2) Screened Exterior Openings  
(B.3) Overhanging trees  
(B.4) Utilities  
(B.5) Stand Pipe  
| (A) Improved Surface & Minimum Driveway widths  
(B) Turn Radius, Maximum Slopes, & Pull Outs  
(C) Physical Clearance & Fire Fuel Breaks on Driveways  
(D) Turnarounds  
(E) Bridges & Culverts  
(F) Gates  
(G) Signs  
| Improved Expanded Dwellings | (A) Fire fuel break  
(B) Minimum of 50 feet to unmanaged lands around structures  
| (A.1) Roofing  
(A.2) Spark Arresters  
(B.1) Clear Clean & Protected Decks, (B.2) Screened Exterior Openings  
(B.3) Overhanging trees  
(B.4) Utilities  
(B.5) Stand Pipe  
| (C) Physical Clearance & Fire Fuel Breaks on Driveways  
(F) Gates  
(G) Signs  
| Accessory Buildings | (A) Avoid slopes > 40%  
(B) Set back from top of slopes > 30%  
| (A.1) Roofing  
(A.2) Spark Arresters  
(B.1) Clear Clean & Protected Decks, (B.2) Screened Exterior Openings  
(B.3) Overhanging trees  
(B.4) Utilities  
(B.5) Stand Pipe  
| (C) Physical Clearance & Fire Fuel Breaks on Driveways  
(F) Gates  
(G) Signs  
| Accessory or Agricultural Structures |  
| (A) Roofing  
(B) Spark Arresters  
(C) Clear Clean & Protected Decks  
(D) Screened Exterior Openings  
(E) Overhanging trees  
(F) Utilities  
(G) Stand Pipe  
|  
| Land Divisions | Fire Mitigation Plan shall be submitted identifying all home sites, building envelopes, and access as necessary to demonstrate compliance with all applicable fire standards on proposed lots.  

**Section 10.030 - Introduction**

A. Cause of Wild Land and Fire Spread and Residential Starts
1. Radiated Heat – Fires are started by heat that radiates or spreads out from flames, (e.g., run your finger above a candle flame). Flames of every size radiate heat. Smaller ground level flames radiate less heat than larger flames generated by crown fires. The larger the flames near a structure the greater the chance of the structure being ignited by radiant heat. Radiant heat is also hotter above the flames than it is beside the flame so where a structure is located on a slope can also affect the risk of a structure igniting from radiated heat from a wild fire.

![Radiation](image)

2. Convection or Direct Contact with Flames – Fires are also ignited by direct contact between the structure and the flame. When flammable material (wood piles, shrubbery, dead leaves, or grass) accumulates under eaves or decks or near the house, the structure is exposed to a much greater risk of ignition as the flammable fuel will feed the flames right at the structure.

![Convection](image)

3. Firebrands or Contact with Flying Embers – Fires can start from burning embers carried aloft from as far away as a mile or more. Fire brands are most dangerous when they:

   a. Land on flammable roofs or decks,
b. Settle or are sucked into openings in eaves, soffits, roof vents, under decking, or in crawl spaces through foundation vents, or

c. Fall on and ignite nearby vegetation or flammable materials, especially if stored or accumulated under eaves, decks, or other structural extensions that can trap the heat generated by the burning of flammable materials.

B. What’s Necessary to Defend Against Wild Land Fire?

1. Access to structures and property.

2. Room to maneuver around structures.

3. Elimination and containment of fire fuels to limit ignition risks around the structure.

4. Use of fire resistant materials to decrease ignition risks at the dwelling or structure.

5. On-site water supplies to help extinguish a small fire before it requires a full response or becomes a wild land fire start.

C. Fire Safety Standards
Sections 10.110 to 10.150 state the Fire Safety Standards on one page. The zones in which the safety standards apply, the benefits of compliance with safety standards, and the necessary actions if an applicable standard cannot be met are stated on the facing pages. Sections 10.210 to 10.240 describe the review and self-certification process and necessary steps to permitting a modification of fire safety standards.

Section 10.110 - Siting Standards - Locating Structures for Good Defensibility
A. Does your building avoid slopes steeper than 40% (more than 40-foot elevation gain over 100 feet horizontal distance)?

A. This Standard is applicable to dwellings, accessory buildings, and agricultural buildings in: - All zones

A. If Yes Then
- Extensive and costly grading and ground disturbance will be avoided
- Emergency responders will have room to access and maneuver around all sides of the structure.
- Structure will avoid exposure to the hottest side of fast moving flames climbing the slope
- Structure will avoid potential of trapping heat rising off of flames on the slope below.

A. If No Then
A modification of fire safety standards must be requested.

The fire mitigation plan submitted with the request for modification must propose mitigation measures such as:
- Structural fire proofing (thermal windows, smaller windows, fire retardant building materials on all sides).
- National Fire Protection Association (NFPA) Sprinkler system if access standards cannot be met.
- Expanded fire fuel breaks.
- Additional irrigation on all sides of the home and an on-site water supply capable of running the irrigation system for extended periods.
- Evacuation plan.
B. Setbacks

1. Is your building set back from the top of slopes greater than 30% by at least 50 feet? - or -

2. Is your building set back from the top of slopes greater than 30% at least 30 feet? - and -

-OR-

No structures or other extensions closer than 30 feet from top of slope
Stone or Concrete patio rather than above ground decking
Enclosed soffits

-OR-

Fire resistant or non-combustible exterior materials (siding, decking, roofing)
Large timber or metal supports for decks or other extensions
Decking area screened or enclosed
Enclosed soffits
B. This Standard is applicable to dwellings, accessory buildings, and agricultural buildings in:
   - Resource and Large Lot Residential Zones

<table>
<thead>
<tr>
<th>B(1). If Yes Then</th>
<th>B(1). If No Then</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Emergency responders will have room to access and maneuver around all sides of the building.</td>
<td>Refer to B(2) below.</td>
</tr>
<tr>
<td>• Building will avoid exposure to the hottest side of fast moving flames climbing the slope.</td>
<td></td>
</tr>
<tr>
<td>• Building will avoid trapping heat rising off flames below.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B(2) - If Yes Then</th>
<th>B(2) - If No Then</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Emergency responders can still access and maneuver around all sides of the building.</td>
<td>A modification of fire safety standards must be requested.</td>
</tr>
<tr>
<td>• Building will be closer to the hottest side of fast moving flames climbing the slope but additional fire proofing of the building will help mitigate risks of ignition.</td>
<td>The fire mitigation plan submitted with the request for modification must propose mitigation measures such as:</td>
</tr>
<tr>
<td>• Flattening the design of the facade on the downhill side of the building will help avoid potential of trapping heat rising off of flames on the slope below allowing the building to be constructed nearer the top of slope.</td>
<td>• Eliminate decks and eaves.</td>
</tr>
<tr>
<td></td>
<td>• Structural fire proofing (thermal windows, smaller windows, fire retardant building materials on all sides).</td>
</tr>
<tr>
<td></td>
<td>• NFPA Sprinkler system if access standards cannot be met.</td>
</tr>
<tr>
<td></td>
<td>• Expanded fire fuel breaks.</td>
</tr>
<tr>
<td></td>
<td>• Additional irrigation on all sides of the home and an on-site water supply capable of running the irrigation system for extended periods.</td>
</tr>
<tr>
<td></td>
<td>• Evacuation plan.</td>
</tr>
</tbody>
</table>
Section 10.120 - Defensible Space – Clearing and Maintaining a Fire Fuel Break

DEFENSIBLE SPACE

Fire Fuel Break Includes: Irrigated fire resistant domestic plantings, low volume slow burning plantings, and trees encouraged to provide shade and ground cooling. Trees should be grouped. Groups of trees shall be spaced to avoid creation of a continuous tree canopy. Trees shall be kept in healthy fire resistant condition. Trees shall be limbed up to create a vacant area between ground fuels and canopy fuels. Under story vegetation shall be minimized and ground cover shall be kept trimmed low to the ground.

Is your building surrounded by a 50-foot wide fire fuel break?

| Fire Fuel Break Area Plan View Illustration | Fire Fuel Break Area Sample |

MAINTENANCE STANDARDS FOR FIRE FUEL BREAK AREA:

- Ground cover maximum 4 inches tall;
- Trees limbed up approximately 8 feet from the ground,
- Trees kept free from dead, dry, or flammable material;
- Ladder fuels must be removed;
- No shrubs or tall plants under trees;
- Shrubs only in isolated groupings that maximize edges of ornamental beds to avoid continuous blocks of ground fuel;
• Keep shrubs and ornamental beds 15 feet away from edge of buildings and drip line of tree canopy; and
• Use well irrigated or flame resistant vegetation (See OSU Extension Service publication called “Fire Resistant Plants for Oregon Home Landscapes”)

**A. This standard is applicable to all dwellings, accessory buildings, and agricultural buildings in:** - All Zones

This standard may be decreased to 30 feet in width for parcels *inside* an exception area or smaller lot residential zone. The decrease to a 30-foot fire fuel break may be allowed without a request for modification of fire standards upon a demonstration that the 50 foot fire fuel break cannot be met.

<table>
<thead>
<tr>
<th>A. If Yes Then</th>
<th>A. If No Then</th>
</tr>
</thead>
</table>
| • Eliminating ladder fuels and limbing trees up helps keep fire on the ground.  
• Including trees in the fire fuel break can catch and deflect flying embers before they land on the structure.  
• Spacing between bedding plants or shrub groupings allows ornamental plantings that do not create a fuel bed.  
• Irrigation provides moisture during the dry months and shading from healthy limbed trees retains moisture longer. Moisture is key to helping dissipate fire energy.  
• Fire resistant vegetation also helps slow spread of fire toward the structure.  | A modification of fire safety standards must be requested.  
The fire mitigation plan submitted with the request for modification must document that the fire fuel break cannot be met:  
• Demonstration why an alternate site on the property cannot be used to allow for the full fire fuel break.  
• Demonstration that an easement allowing for the full fire fuel break cannot be provided for by easement on adjoining land  
• The fire mitigation plan submitted with the request for modification must also propose mitigation measures such as:  
  • Eliminate decks and eaves.  
  • Structural fire proofing (thermal windows, smaller windows, fire retardant building materials on all sides).  
  • Additional irrigation on the side of the home where fire fuel break width requirements cannot be met and an on site water supply capable of running the irrigation system for extended periods.  
  • Evacuation plan. |
B. Is dense unmanaged vegetation beyond 50 feet from the outer edges of your buildings, including any extensions such as decks or eaves, kept to a MINIMUM? If located on steeper ground, have you created and maintained some clearings beyond the 50 feet fire fuel break?

- Those developing steeper properties are advised to provide breaks in the tree canopy across the slope at the outer edges and extending beyond the fire fuel breaks.
- Land beyond the fire fuel break can always be managed for additional safety.
- This is the place for tight trees, dense under-story vegetation, tall waving grass, and unmanaged or less managed lands.
- The outer edge of the fuel break zone can be feathered back into the unmanaged area to provide for a more natural appearing edge condition.
B. This Standard is applicable to all dwellings accessory buildings, and agricultural buildings in: - Resource and Large Lot Residential Zones

<table>
<thead>
<tr>
<th>B. If Yes Then</th>
<th>B. If No Then</th>
</tr>
</thead>
<tbody>
<tr>
<td>• If slopes cannot be avoided, providing for broad breaks in the canopy across the slope 20-30 feet and more can help limit the spread of a canopy fire up slope.</td>
<td>This standard is advisory. No request for modification of fire safety standards is required if it cannot be met.</td>
</tr>
<tr>
<td>• Keeping some wild unmanaged areas is OK if they are far enough from the structure that a wild fire’s progress will be slowed by the decrease in fire fuels as fire approaches developed areas.</td>
<td></td>
</tr>
<tr>
<td>• <strong>NOTE:</strong> Slope hazards increase the threat of structural fire ignition by increasing the chance of a wild land fire getting into and traveling through the tree canopy. If you are developing in a wooded area with steep slopes, every attempt should be made to locate away from the steeper ground. (see §10.110(A) and (B) above)</td>
<td></td>
</tr>
</tbody>
</table>

**Section 10.130- Construction Standards For Dwellings And Structures – Decreasing The Ignition Risks By Planning For A More Fire-Safe Structure.**
A. Is your building designed, built, and maintained to include the following features and materials necessary to make the structure more fire resistant?

1. **Roof Materials**: Do you or will you have fire resistant roofing installed to the manufacturers specification and rated by Underwriter’s Laboratory as Class A, B, or its equivalent (includes but not limited to: slate, ceramic tile, composition shingles, and metal)?

**NOTE**: To give your structure the best chance of surviving a wild fire, all structural projections such as balconies, decks and roof gables **should** be built with fire resistant materials equivalent to that specified in the uniform building code.

2. **Spark Arrestors**: Will all chimneys and stove pipes be capped with spark arresters meeting NFPA standards (e.g., constructed of 12 USA gauge wire mesh with half-inch openings)?

A(1) & (2) These Standards are applicable to all dwellings, accessory buildings, and agricultural buildings in:
- All Zones

<table>
<thead>
<tr>
<th>A(1). If Yes Then</th>
<th>A(1). If No Then</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your roof will resist ignition from fire brands.</td>
<td>Fire resistant roofing is required. There is no way to</td>
</tr>
<tr>
<td>Fire resistant roofing is one of the most</td>
<td>mitigate risks of a wild land fire ignition related to</td>
</tr>
<tr>
<td>important standards of defensibility.</td>
<td>use of more flammable roofing. Fire brands can be</td>
</tr>
<tr>
<td></td>
<td>carried over a quarter mile to land on a roof.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A(2). If Yes Then</th>
<th>A(2). If No Then</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sparks and embers in the fire box of a fireplace</td>
<td>There is no alternative to the requirement that</td>
</tr>
<tr>
<td>or stove will not be allowed to escape through the</td>
<td>spark arrestors be installed and maintained. They</td>
</tr>
<tr>
<td>chimney and start a wild land fire.</td>
<td>are common and widely available.</td>
</tr>
</tbody>
</table>

B. Is your structure designed, built, and maintained to include the following features and materials necessary to make the structure more fire resistant?

1. **Decks**: Will all decks be kept clear of fire wood, flammable building material, dry leaves and needles, and other flammable chemicals? Will decks less than three feet above ground also be screened with noncombustible corrosion resistant mesh screening material with quarter inch or smaller openings? Will decks, as required in accordance with standard **10.110(B)** above, be built of fire resistant material? Will all flammables be removed from the area immediately surrounding the structure to be stored 20 feet from the structure or enclosed in a separate structure during fire season?

2. **Openings**: Will all openings into and under the exterior of the building including vents and...
louvers, be screened with noncombustible corrosion resistant mesh screening material with quarter inch or smaller openings.

3. **Trees**: Will all trees overhanging the building be limbed up 8 feet in accordance with fire fuel break requirements in [10.120(A)] above, kept trimmed back 10 feet from any chimney or stove pipe, and be maintained free of all dead material.

4. **Utilities**: If your private utility service lines are not underground will the utilities be:
   a. Kept clear along their route?
   b. Have a single point of access to the building?

   Do all new buildings and structures served by electricity include a clearly marked power disconnect switch at the pole or off-grid power source?

5. **Stand Pipe**: Will a stand pipe be provided 50 feet from the dwelling or any structure served by a plumbed water system?

---

### B. These Standards are applicable to dwellings, accessory buildings, and agricultural buildings or structures in:

- **All Zones**

<table>
<thead>
<tr>
<th>B(1). If Yes Then</th>
<th>B(1). If No Then</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horizontal extensions, like decks, will be protected from the accumulation of fire fuel. Horizontal extensions create a heat trap for heat if flames are generated beneath them. Limiting fire fuels under horizontal extensions and screening to keep embers or fire bombs from getting in under lower decks will help eliminate the risk of heat being trapped under a deck or porch and igniting a structure.</td>
<td>There is no alternative to the screening and maintenance required under and around the exterior of a structure, its decks, and other horizontal extensions.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B(2). If Yes Then</th>
<th>B(2). If No Then</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vents are built to funnel air through enclosed areas of a structure. Screening on the vents or behind vent louvers ensures that embers are not sucked into the hard-to-reach recesses behind the vents.</td>
<td>There is no alternative to the screening of exterior vents and openings.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B(3). If Yes Then</th>
<th>B(3). If No Then</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy green trees around the house can be retained and may actually help shelter the dwelling from fire brands. Trees and their debris must be maintained in a clean healthy condition.</td>
<td>If maintenance of trees near or overhanging the house is too onerous the trees can be removed. <strong>NOTE</strong>: The presence of trees has been shown to have the benefits discussed in [10.120(A)], above, if properly maintained.</td>
</tr>
</tbody>
</table>
### B(4). If Yes Then

- Threat of a fire start due to downed service lines will be minimized.
- Access to and around the structure will be simplified by limiting aerial access to the structure to a single location.
- Responders will be able to shut down main power so they can respond safely to the structure at the main service switch.

### B(4). If No Then

There is no alternative to the requirement that private utility service routes be kept clear and that development of new buildings or structures served by electricity have a clearly marked power disconnect switch at the pole or off grid power source.

### B(5). If Yes Then

This stand pipe will be available to the homeowner for use to help contain smaller fires prior to emergency responders getting to the site.

### B(5). If No Then

There is no alternative allowed to the provision of a standpipe 50 feet from all combustible structures served by a plumbed water system. Rural response times are always longer than in town. Land owners must do what they can to provide immediate response to small fire starts.

### Section 10.140 - Access Standards - Providing safe access to and escape from your home.

#### A. Does your residential driveway meet standards for improved, all weather driveway surface and minimum driveway widths?

**IMPROVED SURFACE REQUIREMENTS**

![Diagram](image)

**Compaction**

Driveway surface standards shall meet the specifications above or meet an alternate design standard established by a licensed engineer who will certify that the alternate design standard is capable of supporting 75,000 pound gross vehicle weight year round, wet or dry. Compliance shall be demonstrated prior to inspection by the County Road Department to confirm compliance with road approach permit.
MINIMUM DRIVEWAY WIDTHS

Minimum improved width is 12 ft on straight sections and through gentle curves
Minimum improved width is 14 ft on single curves with less than 150-foot radius
Minimum improved width is 16 ft when curves are linked or located on a slope in excess of 10%

A. This Standard is applicable to residential driveways in:
   - All Zones

A. If Yes Then
   Emergency responders will be able to bring all vehicles onto your property and to your building site.

A. If No Then
   A modification of fire safety standards must be requested.
   The fire mitigation plan submitted with the request for modification must propose mitigation measures such as:
   - A demonstration why standards cannot be met and that an alternate site will not allow standards to be met.
   - Proposed alternate road lay out that can allow the best access possible to the building site.
   - NFPA Sprinkler system if alternate access standards cannot provide for timely response.
   - Expanded fire fuel breaks.
   - Additional irrigation on all sides of the home and an on-site water supply capable of running the irrigation system for extended periods.
   - Structural fire proofing (thermal windows, smaller windows, fire retardant building materials on all sides).
   - Evacuation plan and acknowledgment that some or all fire equipment may not have sufficient access to your property to respond.

Is your dwelling accessed by a driveway with curves and slopes that are passable by emergency equipment? And are turnouts provided as needed to allow vehicles to pass safely?
CAN LARGE EQUIPMENT MAKE IT AROUND THE TURNS IN YOUR DRIVEWAY?

| Minimum 20 ft turn radius onto driveway from road | Minimum 48 ft turn radius for curves or switchbacks in the driveway. Larger radius, more gentle turns are desirable where possible |

IS THE SLOPE OF YOUR DRIVEWAY GENTLE ENOUGH FOR EQUIPMENT TO GET UP AND DOWN SAFELY?

| Maximum steady grade of 10% or 10 ft of elevation gain over 100 ft of distance | Maximum steady grade of 10% may be exceeded for short pitches. Short (up to 100-ft lengths) intermittent sections may be up to 12%. No more than three 100-ft lengths in 1,000 ft. |

IF YOUR DRIVEWAY IS LONGER THAN 200 FEET, ARE TURNOUTS PROVIDED ALONG ITS LENGTH?

Turnouts need to be provided at least every 400 feet. Turn outs are intended to allow vehicles to pass safely, especially during an emergency. This should be kept in mind when siting the turnouts. Steeper slopes or tighter corners may require turnouts to be located closer than every 400 feet.
B. This Standard is applicable to all residential driveways in: -All Zones

<table>
<thead>
<tr>
<th>B. If Yes Then</th>
<th>B. If No Then</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Emergency responders will be able to bring all vehicles onto your property and to your building site.</td>
<td>See (A) above.</td>
</tr>
<tr>
<td>• You will be able to get off your property as the fire equipment accesses the site.</td>
<td></td>
</tr>
</tbody>
</table>

C. Does your residential driveway provide adequate clearance for emergency vehicles and is there sufficient clear area along the driveway to allow responders to maneuver safely around their vehicles?

Responding vehicles need over 13 vertical feet and a minimum of 14 horizontal feet of clearance to pass through vegetation along a driveway.

A fire fuel break extending 10 feet either side of the center line of the driveway is required.
C. This Standard is applicable to all residential driveways in:
   - All Zones

<table>
<thead>
<tr>
<th>C. If Yes Then</th>
<th>C. If No Then</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Emergency responders will be able to access your property without damaging your landscaping, native trees, or their vehicles.</td>
<td>See (A) above</td>
</tr>
<tr>
<td>• If there is a need to respond from the driveway, there will be room to maneuver more safely around the emergency vehicles.</td>
<td></td>
</tr>
<tr>
<td>• If there is a major wild land fire, the fire fuel break along the drive will help ensure that the driveway remains passable during the response.</td>
<td></td>
</tr>
</tbody>
</table>

D. If your residential driveway is longer than 150 feet, does it end with a turnaround that is passable for emergency responders?

95-foot-diameter cul-de-sac  120-foot hammerhead
Acceptable alternative to 120-foot hammerhead hammerhead

Acceptable alternative to 120’

<table>
<thead>
<tr>
<th>D. This Standard is applicable to residential driveways in:</th>
<th>All Zones</th>
</tr>
</thead>
<tbody>
<tr>
<td>D. If Yes Then</td>
<td>D. If No Then</td>
</tr>
<tr>
<td>Responders accessing your property in an emergency will be able to get turned around to leave the property, make room for additional responders, or to refill tenders and return.</td>
<td>See (A) above</td>
</tr>
</tbody>
</table>

E. Can the bridges or culverts crossed to access your dwelling on your property accommodate emergency response vehicles?

Culverts larger than a 6-foot diameter and all bridges that are relied on to access development must be engineered constructed and maintained to support 75,000 pounds gross vehicle weight. Culverts less than 6-foot diameter must be installed to manufacturer specifications, including requirements that the culvert be embedded sufficiently to maximize water flow and minimize risk of scouring or undercutting below the pipe.

Bridges should match the finished width of the road or driveway. A minimum bridge width of 14 feet is required and may be built if 7-foot- wide and 50-feet-long pullouts are provided on either side of the bridge.
### F. Can emergency responders get through your gate?

- Gates need to swing or glide.
- Gates need to be operable by a single person and maintained in operable condition.
- The horizontal clearance through a gate must be a minimum of 14 feet.
- Electric or locked gates must be operable or removable by emergency responders.

### G. Are the signs you’ve posted for emergency responders legible and in good repair?

Signs required to:
- Limit parking.
- Mark fire lanes.
- Direct responders to an on-site water source.
- Identify electrical service shut-off at the power pole or off grid power source.
- Post weight limits on existing bridges or culverts.

Must be made and maintained so that:
- Lettering is light colored and reflective against a dark background – except that red and white 12 inch by 18 inch fire lane, no parking signs Per Figure D(103.6) of the 2004 Oregon Fire Code.
- Letters are a minimum of 4 inches tall.
- Letters are a minimum of ½-inch-wide-letter strokes.
- Signs are posted and kept clear of vegetation so they are fully visible.

### E. This Standard is applicable to residential driveways in: -All Zones

<table>
<thead>
<tr>
<th>E. If Yes Then</th>
<th>E. If No Then</th>
</tr>
</thead>
</table>
| Emergency responders will be able to get to or through your property without risk of damage to equipment or roadway structures. | A modification of fire safety standards must be requested. The fire mitigation plan submitted with the request for modification must propose mitigation measures including:
- Any culvert greater than a 6-foot diameter or bridge not capable of supporting 75,000 gross vehicle weight shall be signed at both entrances.
- Other applicable mitigation measures listed in (A) above. |

### F. This Standard is applicable to residential driveways in: -All Zones

<table>
<thead>
<tr>
<th>F. If Yes Then</th>
<th>F. If No Then</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency responders will be able to access your property.</td>
<td>No alternatives exist for the requirement for a passable gate.</td>
</tr>
</tbody>
</table>

### G. This Standard is applicable to residential driveways in: -All Zones

<table>
<thead>
<tr>
<th>G. If Yes Then</th>
<th>G. If No Then</th>
</tr>
</thead>
</table>
Emergency responders will be able to access and navigate your property and the development site. No alternatives exist for the requirement for that clear and legible signage be installed and maintained.

H. Are the roads to your residential property maintained in a condition that is passable for emergency vehicles? Do you know who is responsible for required improvements and maintenance?

**DEFINITIONS – WHO IMPROVES AND MAINTAINS WHICH EXISTING ROADS?**

**County Roads are:**
- Fully dedicated public roads over which the County has full jurisdiction.
- The County is responsible for improvements and maintenance of county roads including bridges, culverts, ditches, etc.
- Most, if not all, public roads in the county meet the minimum access requirements for emergency vehicles.

**Local Access Roads are:**
- Public roads over which the County has limited jurisdiction.
- The County is not liable for failure to improve the local access road or keep it in repair.
- The County has limited ability to spend money on local access roads and expenditure on local access roads is made only in emergencies and is subject to special review process prior to the expenditure.
- Landowners served by the road must improve or maintain the road if it is to stay in good repair.
- Some local access roads have organized maintenance organizations but most do not.
- Many local access roads meet minimum access requirements but some will require improvements in order to be accessible to emergency responders and all will require maintenance.

**Private Roads are:**
- Neither public roads nor county roads.
- The County cannot improve or maintain private roads.
- Private roads serve more than one dwelling but are not required to be open to the public.
- The land owners served by the private road are solely responsible for its improvement and maintenance.
- Many private roads will require improvements in order to be accessible to emergency responders and all will require maintenance.

**Driveways are:**
- Private access roads serving no more than two dwellings.
- The home owner bears sole responsibility for driveway improvement and maintenance.

Per ORS 368.001-368.031
### ACCESS ROAD STANDARDS – WHAT MAY HAVE TO BE DONE TO ROADS LEADING TO BUT NOT PART OF YOUR PROPERTY?

If a legally created parcel is accessed by a County or State improved and maintained road, the applicant must demonstrate that driveway standards are met on the property and is responsible for continued maintenance of the driveway in accordance with standards.

If a legally created parcel is accessed by a local access or private road the road way will need to be determined to meet county road standards or minimum standards for a fire apparatus access road (defined in Chapter 5 of the 2004 Oregon Fire Code) prior to new construction. A fire apparatus access road needs to have an improved all-weather surface of 20-feet wide or sections of the road with a finished road surface width of 20 feet for a length of 40 feet at no greater than 400-foot intervals. All access standards, other than width, turn radius, and slope or grade that are applicable to driveways, (A) – (H), are also applicable to local access and private roads. Improvements made within a local access road will require a permit to do work in a public right of way.

Land divisions creating new parcels need to improve roads up to the point of access to the proposed land division to meet public road standards prior to final land division approval.

<table>
<thead>
<tr>
<th>H. This Standard is applicable to residential development in:</th>
<th>-All Zones</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H. If Yes Then</strong></td>
<td><strong>H. If No Then</strong></td>
</tr>
</tbody>
</table>
| Emergency responders will be able to get to your property with any vehicle at a reasonable rate of speed with little risk of damage to equipment or roads. | A modification of fire safety standards must be requested. The fire mitigation plan submitted with the request for modification must:  
• Employ applicable mitigation measures listed in (A) above, -AND-  
• Demonstrate that county road or fire apparatus access road standards cannot feasibly be met.  
• Demonstrate that improvements achieve basic access (driveway standard) along sections determined incapable of meeting a higher standard.  
• If basic driveway standard is not met at any point, that section shall be clearly signed from both directions calling out the weight limit, width of narrow road section, or grade and length of steep road way.  
• Ability of responders to get to a site is limited by the ability of an applicant to make and maintain off-site improvements.  
• The land owner will be notified of service limitations resulting from substandard access and required to document acknowledgement |

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Chapter 10 – Fire Safety Standards – Wasco County Land Use and Development Ordinance 23
Section 10.150 - Fire Protection or On-Site Water Required
Ensuring dwellings have some fire protection available through manned or unmanned response.

<table>
<thead>
<tr>
<th>A. Are you proposing to construct a dwelling inside a structural fire protection district?</th>
<th>-OR-</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON SITE WATER IS REQUIRED IN BOTH URBAN AND RURAL ENVIRONMENTS FOR FIRE SAFETY (Fire Flow Requirements).</td>
<td></td>
</tr>
</tbody>
</table>

Dwellings less than or equal to 3,500 square feet can rely on emergency responders to meet the on-site water requirements if they are inside a fire protection district.

Dwellings in excess of 3,500 square feet require on-site water in excess of the amount of water that could reasonably be delivered to the site by emergency responders. Dwellings in excess of 3,500 square feet need to provide an NFPA sprinkler system to meet on site water requirements. Provision of an NFPA sprinkler system meets fire code fire flow requirements.

Structures must be located inside a structural fire protection district if possible. It is not possible to be in a fire protection district when it is demonstrated that the dwelling cannot locate within, annex into a district, or contract with a structural fire protection district for service.

<table>
<thead>
<tr>
<th>A. This Standard is applicable in:</th>
<th>-All Zones - as specifically noted in the standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. If Yes Then</td>
<td>A. If No Then</td>
</tr>
<tr>
<td>• A special taxing district exists and volunteer or professional fire fighters will respond to and defend a structure to the best of their ability.</td>
<td>Refer to [B], Below</td>
</tr>
<tr>
<td>• Installation of an NFPA-approved sprinkler system meets the fire flow requirements for rural structures when a responders’ ability to bring water to the site cannot. (See other benefits of NFPA sprinkler systems in [B], below.)</td>
<td></td>
</tr>
</tbody>
</table>
**B. Are you proposing to construct a dwelling outside a structural fire protection district?**

<table>
<thead>
<tr>
<th>ON-SITE WATER IS REQUIRED IN BOTH URBAN AND RURAL ENVIRONMENTS FOR FIRE SAFETY EVEN OUTSIDE A STRUCTURAL FIRE PROTECTION DISTRICT (Fire Flow Requirements).</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dwellings can be located outside a structural fire protection district</strong> upon demonstration that the parcel or home site cannot locate within, annex into, or contract with a structural fire protection district for service. If a dwelling is proposed outside a structural fire protection district, you cannot rely on emergency responders to meet the fire code fire flow requirements. Providing an NFPA sprinkler system is required to meet fire flow requirements unless a request for modification of the fire safety standards has been requested and approved.</td>
</tr>
<tr>
<td><strong>Dwellings in the Forest Zones and outside a structural fire protection district</strong> must provide a year-round on-site 4,000 gallon water source, or access to a stream or spring having continuous year-round flow of at least 1 cubic foot per second.</td>
</tr>
<tr>
<td>- The applicant must provide a written statement from Oregon Water Resources Department verifying that permits or registrations required for any water diversion or storage have been obtained or are not required.</td>
</tr>
<tr>
<td>- Driveway access and a turnaround meeting the access standards in Section 10.140 must be extended to within 10 feet of the water source.</td>
</tr>
<tr>
<td>- Permanent signs shall be posted directing emergency vehicles to approved water sources.</td>
</tr>
</tbody>
</table>

**B. This Standard is applicable in:** -All Zones- and as specifically noted in the standard

<table>
<thead>
<tr>
<th>B. If <strong>Yes</strong> Then</th>
<th>B. If <strong>No</strong> Then</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Provision of an NFPA sprinkler system does not rely on a responder’s presence to function and can often extinguish a small ignition before it grows to the point where a large-scale response is necessary.</td>
<td>If a NFPA sprinkler system is required but cannot be provided, a modification of fire safety standards must be requested. This is necessary because either no structural fire protection will be provided by a recognized district or because the dwelling exceeds the size determined to be defensible by local responders.</td>
</tr>
<tr>
<td>- Meeting fire flow requirements for larger structures can require an on-site water source of 8,000 gallons or more (see alternatives to sprinkler system).</td>
<td>The fire mitigation plan submitted with the request for modification must include an on-site water source capable of meeting fire code requirements for water supplies in rural settings. Requirements for rural water supplies to meet fire flow requirements are generalized here:</td>
</tr>
<tr>
<td>- Installation of a sprinkler system in site-built homes, particularly larger homes, is often the most affordable way to meet fire flow requirements. Installation of an NFPA approved sprinkler system can save home owners a significant amount on their fire insurance rates and will pay for itself over time.</td>
<td>- Minimum on site water storage 2,000 gallons</td>
</tr>
<tr>
<td>NOTE: Manufactured homes and historic structures may substitute on site water provision for inclusion of a residential sprinkler system when otherwise required. The county recognizes the disproportionately high cost of installation of NFPA sprinkler systems in this type of structure and the limited ability to alter the design of structures when locating a historical structure or</td>
<td></td>
</tr>
<tr>
<td>If a NFPA sprinkler system is required but cannot be provided, a modification of fire safety standards must be requested. This is necessary because either no structural fire protection will be provided by a recognized district or because the dwelling exceeds the size determined to be defensible by local responders.</td>
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</tr>
<tr>
<td>NOTE: Manufactured homes and historic structures may substitute on site water provision for inclusion of a residential sprinkler system when otherwise required. The county recognizes the disproportionately high cost of installation of NFPA sprinkler systems in this type of structure and the limited ability to alter the design of structures when locating a historical structure or</td>
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<tr>
<td>NOTE: Manufactured homes and historic structures may substitute on site water provision for inclusion of a residential sprinkler system when otherwise required. The county recognizes the disproportionately high cost of installation of NFPA sprinkler systems in this type of structure and the limited ability to alter the design of structures when locating a historical structure or</td>
<td></td>
</tr>
</tbody>
</table>
manufactured home. Applicants locating a manufactured home or historic structure on their property may elect to install an on-site water source meeting the on-site water requirements listed in this subsection. No request for modification needs to be made for these structures.

<table>
<thead>
<tr>
<th>8,000 gallons</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;5,000 square foot dwelling - 13,000 gallons</td>
</tr>
</tbody>
</table>

When on-site water is provided to meet fire flow requirements within a fire protection district, the on-site source must be made accessible to responders.

When on-site water is provided to meet fire flow requirements outside a fire protection district, then the fire mitigation plan shall include provisions by the home owner for applying the water to the structure in the event of a fire.

### Section 10.210 - Fire Safety Standard Review Process

A. Compliance with applicable fire safety standards is required by the ordinance for new, replacement, and modified structures in all rural zones.

1. Fire standards shall be made a part of the conditions of approval when a conditional use permit, site plan or subject to standards review, partition, subdivision, or other land use action is required prior to construction.

2. Structures or alterations to structures that are subject to ministerial review must also comply with all applicable fire standards prior to receiving zoning approval on a building permit application.

3. In all cases compliance with applicable fire standards shall be self-certified prior to receiving zoning approval on a building permit.

4. Certifications shall be verified within one year of approval and may be verified by staff site visits at any time.

B. Continued compliance with fire safety standards is required.

1. Compliance is the responsibility of the land owner.

3. An illustrative checklist will be provided to land use permit applicants and building permit applicants that explains all necessary steps to comply with applicable fire safety standards.

4. Required compliance with fire safety standards shall be disclosed to future land owners prior to sale of any parcel.
a. Where fire safety standards are self-certified as part of a ministerial review, the self-certification shall be recorded prior to receiving zoning approval on the building permit application.

b. If one or more applicable fire safety standards cannot be met the applicant may request a modification of standards. The requested modification must be approved and the terms of the approval recorded in the county records prior to receiving zoning approval on a building permit application. See 10.220 below.

c. Where fire safety standards, or a modification of the standards, are applied through a land use review as conditions of approval, the conditions of approval shall be recorded along with the notice of decision.

Section 10.220 - Modification of Fire Safety Standards
If one or more fire safety standard cannot be met, the applicant must request a modification to fire safety standards. The request for modification shall include a site specific fire safety mitigation plan. The modification of standards review shall be processed in accordance with the procedures in LUDO Section 2.060(A)(6). Notice prior to the decision shall be provided to fire responders with jurisdiction by the Planning Director. The decision to approve or deny the request for modification shall meet all public notice requirements.

Section 10.230 - Fire Safety Mitigation Plan
A fire safety mitigation plan is required when an applicant needs to request a modification to one or more fire safety standards listed on the self-certification check list. A fire safety mitigation plan is also required for any land division creating lots that can accommodate dwellings. A fire mitigation plan shall include the following:

A. One or more maps and accompanying narrative statement addressing the following:
   1. Site description.
   2. Documentation of fire protection service or proposed plan for on-site fire protection.
   3. Documentation of on-site water supply where required.
   4. Driveway construction plan including gate features, size and locations of bridges or culverts and proposed signage.
   5. Documentation of fuel break areas if land on adjoining properties is relied on to meet fuel break requirements.
   6. Public or private road plans for new roads to serve proposed land divisions (including location, size, and type of bridges and culverts).
   7. Other information deemed necessary to allow adequate review of the request for modification.

B. Statement of need
   A clear statement of why the fire safety standards cannot feasibly be met.
C. Risk Assessment
An assessment of increased risk of wildfire damage if standard is modified. Risk assessments shall consider the purpose of the standard that cannot be met, the specific proposal, and site conditions to determine what, if any, additional exposure to wild land fire risks could be created by approval of the modification to fire safety standards. The consideration shall include increased risk of the proposed structure becoming a source of ignition and risks to the proposed structure from a wild land fire ignited elsewhere and traveling through the site.

D. Statement of Additional Action Proposed to Eliminate or Minimize Increased Risks
A clear list of additional measures proposed by the applicant to address any increased risks identified in the risk assessment.

Section 10.240 - Review of Requested Modification(s)

A. Planning Director Shall Seek Review

1. The Planning Director shall request and consider the comments and recommendations of local emergency responders, including ODF and the State Fire Marshal’s Office when making the final decision on a request for modification of fire safety standards. The complete fire safety mitigation plan shall be forwarded to all commenting responders including the Deputy State Fire Marshal.

2. Comments and recommendations by local responders shall be provided to the Planning Director within 15 days.

B. Responses to the Director’s Request for Review

1. Responders’ comments and recommendations shall do one of the following:
   a. Support the modification with mitigation measures proposed by the applicant.
   b. Support the modification with a recommendation for alternate mitigation measures detailed by the responders.
   c. Accept the request for modification conditionally though minimum standards cannot be met. This will be done only when the responder commenting on the request cannot recommend feasible means to mitigate risks resulting from approval of the modification. Acceptance of a modification that cannot be fully mitigated or meet minimal standards will also include an assessment of any limitations of service that may accompany approval of the modification.
E.g., an existing off-site bridge is located along a private road accessing the applicant’s any existing dwellings. The bridge is weight limited but cannot be feasibly upgraded for the one new home. One or more responders may require that the weight limit of the existing bridge be determined and clearly posted and they may also elect to notify the current land owner and all other residents that larger responding vehicles will not respond to calls accessed by that bridge.

d. Recommend denial of the requested modification(s) on the grounds that:

   (1) The proposed modification is not necessary because standards can and should be met, including consideration and selection of an alternative location for the development.

   (2) Approval of the proposed modification will result in undue risk to life and safety.

2. Comments and recommendations from emergency responders shall be supported by reasons sufficient to allow the Planning Director to weigh the evidence and arguments prior to deciding to grant, conditionally grant, or deny a request for modification of fire safety standards.

3. Approval or denial of a modification to standards is not subject to variance criteria in the LUDO.

4. A modification of standards can be reviewed and decided in conjunction with another land use decision where other land use permits are required.

5. Approval of a modification of standards is subject to administrative review, public notice, and the opportunity for further review on appeal under LUDO Section 2.160.

6. Certifications shall be verified within one year of approval and may be verified by staff site visits at any time.
list of potential mitigation measures for the different types of development constraints. This list is not all-inclusive. An applicant may propose other methods of mitigation. Proposed mitigation measures shall be included in the applicant's zoning amendment submittal.

3202.03: Natural Features

To the extent reasonable, the arrangement of land uses shall preserve or complement the natural features of the site, such as but not limited to wetlands, streams, slopes 30% or greater and significant trees.

3202.04: On Site Accommodation of Necessary Requirements

A zoning amendment proposal shall provide for the required parking, landscaping, open space, snow storage, drainage and all other land use requirements as provided for in this Code. Such uses shall not be placed off-site in order to make more land available for development.

3202.05: Wildfire Hazard Areas

In determining appropriate densities and/or uses for a particular property, the Review Authority shall take into account: 1) the wildfire hazard potential based on such factors as slope, aspect, vegetation types, availability of firefighting infrastructure, and other relevant factors as identified in the Summit County Community Wildfire Protection Plan (CWPP); 2) the potential impact to the public health, safety and welfare; 3) wildfire mitigation measures as required and/or allowed by the County; and 4) the proximity of the proposed development site to existing fire stations and the corresponding response zone and its inclusion in a designated fire protection district. Development projects seeking a rezoning shall ensure that wildfire hazard areas do not pose an undue risk to the public health, safety and welfare. As a part of a rezoning application, the following is required however the County may waive these requirements if deemed unnecessary by the Review Authority:

A. The submittal of a forest management plan, fuels reduction plan, or defensible space plan that includes proposed mitigation for any wildfire hazard area shall be reviewed by the Colorado State Forest Service (“CSFS”) as well as the US Forest Service, and local fire protection districts as deemed appropriate pursuant to the Review and Referral process per Section 12000.06 unless such a rezoning application involves rezoning a property to the Open Space zone district per Section 3301.18. A forest management plan is typically required for properties of 20 acres or more with significant wildlife values. A fuels reduction plan or defensible space plan is typically required for properties less than 20 acres. When a required Fuels Reduction Plan also meets the requirements of a defensible space plan, only the more comprehensive shall be required. At a minimum, all such plans shall include the following unless deemed unnecessary by the Review Authority:
1. A purpose statement.
2. Maps showing property boundaries, existing and proposed roads, existing and proposed building envelopes, defensible space zones, and prescription areas.
3. An inventory of current fuels. Except when active silviculture activities are a part of a forest management plan, this may be a qualitative statement rather than a quantitative assessment.
4. The location of subdivision wide shaded fuel or fire breaks.
5. Identification of overhead power lines and prescriptions for removing hazardous trees in close proximity.
6. Provision of approved secondary fire apparatus access and emergency water supply (e.g. fire hydrants; cisterns).
7. Methods and timetables for controlling, changing, or modifying areas on the property. Elements of the plan shall include removal of slash, snags, other ground fuels, ladder fuels and dead trees, and the thinning of live trees.
8. A plan for maintaining proposed fuel reduction measures.
B. Inclusion in a fire protection district or other arrangements for fire protection as evidenced by a Can and Will Serve letter or its equivalent from the appropriate fire protection district except for rezonings that would not result in an increase in density or intensity or use or to Open Space District as described in Section 3301.18.
C. Other measures as deemed necessary to reduce the wildfire hazard including consideration of the goals and policies set forth in the CWPP.
b. Soil Preparation: Preparatory to seeding, the top four (4) inches of the surface shall be tilled into an even and loose seedbed four (4) inches deep, free of clods in excess of four inches in diameter, or a minimum of two (2) inches of topsoil shall be applied to establish the desired line and grade. Planting of grass seed shall be done immediately following, and not more than ten (10) calendar days following surface preparation.

c. Required Seed Mix: All seeding shall be done with one of the seed mixes listed in Table 3-2 unless another seed mix is approved by the Review Authority based on its similarity to native vegetation and drought tolerance. Sod may be used in areas provided it is approved by the Review Authority in accordance with these regulations. The seed mix purity shall be a minimum of 95% pure live seed (PLS). The specified application rate per total mix shall be 80 pounds per acre broadcast, and 15-20 pounds per acre drilled.

d. No water to supplement natural precipitation shall be required if a well permit or water provider prohibits outdoor watering: However, a person desiring to revegetate a site is encouraged to utilize supplemental water to establish vegetation if such is available by a well permit, central water systems or other water provider using tank trucks.

e. Timing of Seeding: Where outside watering is not a practicable option, seeding shall be done in the fall after September 15, so that the seeds can germinate in the spring due to the spring melt and spring precipitation.

f. Establishment of Revegetation: Revegetation or ground cover shall be considered established if, when viewed from above, it covers 80% or more of the ground surface in a uniform manner with no sizable bare spots. The ground cover growth shall be such that it is effective in controlling erosion and sedimentation.

g. Weed-free Revegetation: Landscaping and revegetation shall be free from weeds as identified by the County as invasive, noxious or otherwise nuisance weed species.

K. Site Cleanup: After all planting operations are completed, all trash, excess soil, empty plant containers and rubbish shall be removed from the site. Any scars, ruts or other marks in the ground caused by this work shall be repaired. All construction debris from other construction on site shall be removed from all landscaped areas, especially gypsum board and similar materials that are toxic to plant life. The ground shall be left in a neat and orderly condition throughout the site.

L. Responsibility: It is a developer's responsibility to provide for the short-term two (2) to three (3) year success of the landscaping unless such responsibility is transferred to a property owner or a homeowners association as evidenced by the submission of legal documents that provide for the maintenance of the landscaping areas and a clearly defined written plan on how landscaping needs to be maintained (irrigation schedule, irrigation system maintenance, pruning, weeding, etc.). It is a property owner's or homeowners association's responsibility to provide for the long-term success of landscaping. Recommendations pertaining the landscaping design and installation are provided in the Landscaping Guide. Where a developer is in doubt as to how to accomplish these goals, professional advice should be sought.

M. Landscaping and Snow Storage: Landscaping shall be designed to be protected from snow storage areas and from snow shedding off of roofs. Hardy landscaping plants that will not be damaged by snow storage may be located in snow storage or snow shedding areas.

N. Required Sight Distance: No landscaping shall block the required sight distance at driveway or road intersections per the specific requirements contained in Chapter 5.

O. Establishment of Finished Grade: All disturbed areas within approved grading areas as shown on the official plans shall be re-graded to blend into the natural undisturbed grade. Such regrading shall occur within the disturbance envelope unless grading was approved outside of the disturbance envelope on the official plans.

P. Defensible Space Requirements: All landscaping shall meet the defensible space requirements set forth in the Summit County Building Code unless waived by the Review Authority when the specific conditions and individual circumstances (i.e. slope, aspect, vegetation types, availability of firefighting infrastructure, and other relevant factors as identified in the Summit County Community Wildfire Protection Plan (CWPP)), of a given project do not warrant imposition of this standard. The property shall be divided into three zones as depicted below:
1. **The Immediate Zone.** 0 to 5 feet from the furthest attached exterior point of the home. All vegetation and combustible and flammable materials shall be moved away from exterior walls, under the eaves, and/or decks. This includes: mulch, shredded rubber, ground fuels, flammable plants, leaves, needles, and firewood piles.

2. **The Intermediate Zone.** 5 to 30 feet from the furthest attached exterior point of the home. This is the landscaping/hardscaping zone of the defensible space through the use of careful landscaping or creating breaks that can help influence and decrease fire behavior. All dead and diseased trees, shrubs, and other landscaping materials shall be removed. Removal of ladder fuels (vegetation under trees) shall occur so a surface fire cannot reach the crowns of the trees. Limb up trees to a height of 10 feet. For shorter trees, trim to a height of 1/3 the overall tree height. Trees shall be spaced to have a minimum of eighteen feet between the crowns with the distance increasing with the percentage of slope. trees and shrubs in this zone should be limited to small clusters of a few each to break up the continuity of the vegetation across the landscape. Irrigated trees, shrubs, and other landscaping material shall be preserved if they are limbed to remove dead branches and well-spaced to reduce the risk of a fire spreading to other vegetation or structures.

3. **The Extended Zone up to 60 Feet.** 30 to 60 feet and 60 feet to the property line from the furthest attached exterior point of the home. This zone focuses on interrupting a fire’s path and keeping the flames smaller and on the ground. All dead and diseased trees, shrubs, and other landscaping materials shall be removed. The accumulation of ground litter and debris shall be disposed of or dispersed. Small conifers growing between mature trees shall be removed. Vegetation adjacent to storage or other outbuildings shall be removed. Trees shall be spaced to have a minimum of twelve feet between the crowns with the distance increasing with the percentage of slope.

4. **The Extended Zone Over 60 Feet.** This zone focuses on interrupting a fire’s path and keeping the flames smaller and on the ground. All dead and diseased trees, shrubs, and other landscaping materials shall be removed. The accumulation of ground litter and debris shall be disposed of or dispersed. Small conifers growing between mature trees shall be removed. Vegetation adjacent to storage or other outbuildings shall be removed. Trees shall be spaced to have a minimum of six feet between the crowns with the distance increasing with the percentage of slope.

### 3605: Plan Requirements for Landscaping

Landscape plans shall provide for the installation of plant materials, grading and other site work that complies with the requirements of this section. Landscape plans shall be prepared by a landscape architect, landscape contractor, horticulturist, or other qualified professional or individual. The landscaping plan shall include the following:

A. North arrow and scale. Scale shall be one to ten (1” = 10’) to one to 30 (1” = 30’) or larger for sites of two (2) acres or less, two to 50 (2” = 50’) or larger for sites larger than two (2) acres.

B. Topographic contours at two (2) foot intervals or other appropriate intervals as approved by the Planning Department.

C. Location of the following items:
   1. Existing vegetation, including Significant Trees;
   2. Significant physical site features such as watercourses;