

# Linn and Benton County Fire Departments Access and Water Supply Application Guide

#### March 2023

Based on 2022 Oregon Fire Code
Approved by the Linn and Benton County Fire Defense Boards

#### PREAMBLE AND SCOPE OF AUTHORITY

The jurisdictions identified in Appendix A.1 of this document have elected to administer and enforce the Oregon Fire Code under the authority granted to them by ORS 476.030 and ORS 476.060.

In order to further the Oregon State Fire Marshal's goal of promoting fire code consistency throughout the state, the jurisdictions listed herein have agreed to apply these regulations uniformly throughout both Linn and Benton Counties.

The listed jurisdictions have prepared this document to provide good faith guidance to building officials, contractors, business owners, the public, and fire marshals on local interpretations and practices that are considered to be in compliance with the Oregon Fire Code. The intent is to clarify aspects of the code that are vague or non-specific by addressing selected issues under normal conditions. This document does not create or replace code provisions and is not an adopted policy of the above jurisdictions. The reader is cautioned that the guidance detailed in this document may or may not apply to their specific situation, and that the designated authority for each jurisdiction (AHJ) retains final authority to determine compliance.

## THESE GUIDELINES DO NOT CREATE NOR REPLACE PROVISIONS OF THE OREGON FIRE CODE

Copies of the Oregon Fire Code may be obtained through the Oregon State Fire Marshal's website: https://www.oregon.gov/osp/programs/sfm/Pages/Fire Codes.aspx.

#### **APPLICATION**

Application of the regulations contained herein, are based upon the following facts:

- Water supplies for fire protection of public buildings as specified in ORS 479.200, has been a requirement throughout the State of Oregon since July 1, 1967.
- Regulations for fire department access and fire protection water supplies for all buildings and facilities throughout the State of Oregon, has been a requirement of the Oregon Fire Code since July 15, 1992.

As such, these regulations shall apply to all structures, facilities, and conditions arising on or after October 1, 2022, and to all existing structures, facilities, and conditions; under any of the following situations (**Oregon Fire Code Chapter 1**):

- 1) Conditions not legally in existence as of October 1, 2022, or
- 2) Conditions when identified by specific sections of the Oregon Fire Code, or
- 3) Conditions which, in the opinion of the Fire Code Official, constitute a distinct hazard to life or property.

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#### SECTION 1: FIRE DEPARTMENT APPARATUS ACCESS ROADS

#### 1.1 Definitions

These definitions are to assist with understanding terminology used regarding fire department apparatus access roads. Terms include both those from the Oregon Fire Code as well as terms that are used specifically within this document.

- 1. **Fire Apparatus Access Road.** See the definitions of "private driveway", "fire lane", and "private road". Fire apparatus access roads provide access to a facility, building or portion thereof for use during emergency fire operations.
- 2. **Private Driveway** A private driveway serves not more than two dwellings or utility structures. Private driveways are not required to be open for access by the general public. Property owners bear the sole responsibility for all driveway construction, improvement, and maintenance.
- 3. **Fire Lane** A roadway or other passageway developed to allow movement of fire apparatus. A fire lane is not necessarily intended for routine vehicular traffic by the general public other than fire apparatus. Fire lanes are commonly used for the movement of fire apparatus on sites where buildings are located some distance from public streets and roads.
- 4. **Private Roads** A road that serves three or more dwellings or other structures. Private roads are not required to be open for routine access by the general public. Construction, improvement, and maintenance is the sole responsibility of the landowners who are served by the private road.
- 5. **Key Box** A secure, tamperproof device with a lock operable only by a fire department master key and containing building entry keys and other keys that may be required for access in an emergency.

#### 1.2 Fire Department Apparatus Access; General Regulations and Scope

Required fire apparatus access roads shall be provided and maintained for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. **Oregon Fire Code Chapter 5** 

For the purposes of this document, the terms "private driveway", "fire lane", and "private road" (defined in section 1.1), specify fire apparatus access roads that are within the scope of this document.

**NOTE:** Specifications and regulations for public streets and roads that are regulated by county or city governing bodies in accordance with ORS 368.039 <u>are not</u> within the scope of this document.

#### Specifications:

- 1. Fire apparatus access roads and specifications are allowed to be modified where any of the following conditions apply:
  - a. A building has an automatic fire sprinkler system installed in accordance with the provisions of **Oregon Fire Code Chapter 9**.
  - b. Fire apparatus access roads cannot be installed because of location on property, topography, waterways, non-negotiable grades, or similar conditions. Under this condition, an approved alternate means of fire protection shall be provided as approved by the fire code official. Such approvals shall be granted on a case-by-case basis and shall not be precedent setting.

**NOTE**: Under this condition, a deed restriction will be recorded for the parcel in question to indicate that emergency vehicle access does not conform to the requirements of the Oregon Fire Code and as such, this condition makes the delivery of fire and life safety emergency services by the local fire department not possible within a timeframe that allows for efficient emergency scene mitigation.

- c. Where there are no more than two dwellings (Group R-3) or utility (Group U) structures served by a fire apparatus access road.
- 2. Fire apparatus access roads shall be clearly delineated on submitted site plans and/or civil drawings. Plans shall contain sufficient information to allow the fire code official to conduct a thorough review.

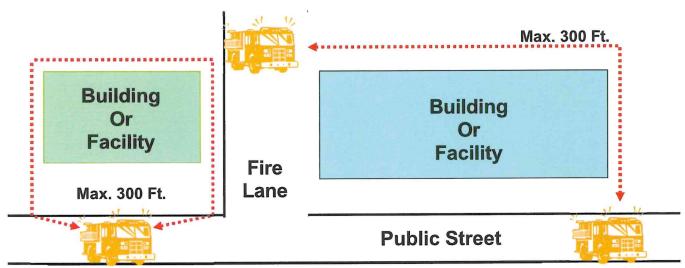
#### 1.3 Proximity of Buildings to Fire Apparatus Access Roads

#### Requirement:

The fire apparatus access road shall extend to within 150 feet of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility. **Oregon Fire Code Chapter 5** 

An approved route generally follows the outline of a building and is not closer than 10 feet from the nearest edge of the building. This route follows where fire hoses may be deployed during fire operations.

#### Specifications:



#### 1.4 Multiple Fire Apparatus Access Roads & Road Separation

#### Requirement:

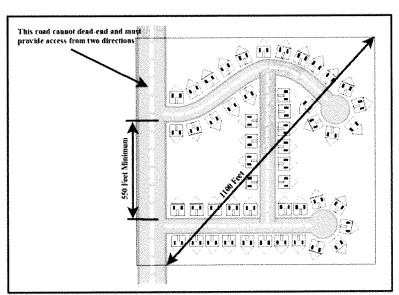
More than one fire apparatus access road may be required, based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access. Access roads shall be located as required by the fire code official. **Oregon Fire Code Appendix D** 

#### Specifications:

Refer to the Oregon Fire Code, Appendix D for specifications.

- 1. Two access roads are required under the following conditions:
  - a. One- and two-family dwellings (Group R-3) where there are more than 30 dwelling units with an exception for installation of automatic fire sprinkler systems.
    - The number of dwelling units accessed from a single fire apparatus access road shall not be increased unless fire apparatus access roads will connect with future development, as determined by the fire code official.

- b. Multiple-family residential developments (Group R-2) having more than 100 dwelling units with an exception for installation of automatic fire sprinkler systems installed within each structure.
- c. Multiple-family residential developments (Group R-2) having more than 200 dwelling units regardless of whether they have an approved automatic fire sprinkler system installed within each structure.
- d. At commercial or industrial developments with buildings or facilities having a gross building area of more than 62,000 square feet.
  - Exception: Projects having a gross building area of up to 124,000 square feet that have a single approved fire apparatus access road where *all* buildings are equipped throughout with approved fire sprinkler systems.
- e. At commercial or industrial developments with buildings exceeding three stories or 30 feet in height.
- 2. Access roads shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses.
- 3. The access roads shall enter onto a road that has access from two different directions.



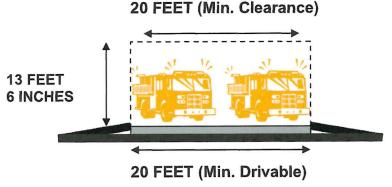
#### 1.5 Fire Apparatus Access Road Widths and Vertical Clearances

#### Requirement:

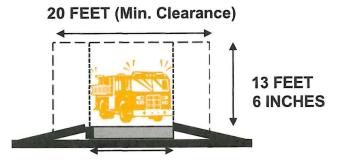
All fire apparatus access roads must have a drivable surface for fire vehicle travel that is wide enough to allow their full, complete, and instant use during fire and other emergencies. **Oregon Fire Code Chapter 5** 

#### Specifications:

1. Fire apparatus access roads shall have an unobstructed driving surface width of not less than 20 feet (26 feet adjacent to fire hydrants) and an unobstructed vertical clearance of not less than 13 feet 6 inches.



**EXCEPTION**: When serving two or less dwelling units or accessory buildings, the driving surface may be reduced to a width per the AHJ, although the unobstructed width shall be 20 feet. Turning radii for curves and turnarounds on reduced width roads shall be not less than 28 feet and 48 feet respectively, measured from the same center point.



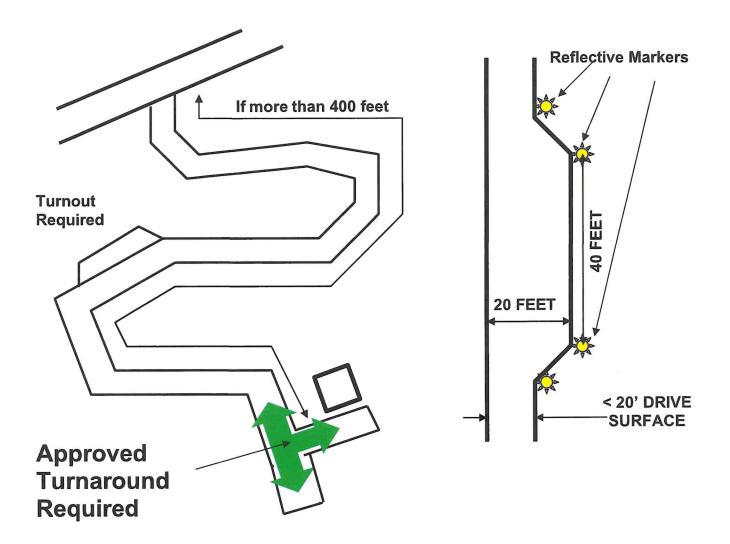
Min. Drivable per AHJ

#### Requirement:

When a driveway exceeds 400 feet in length with a drivable surface less than 20 feet, turnouts shall be provided, unless otherwise approved by the fire code official. **Oregon Fire Code Chapter 5** 

#### Specifications:

- a. Turnouts shall be 20 feet wide and 40 feet long at the widest part.
- b. Turnouts shall be located no more than 400 feet apart unless approved by the fire code official.
- c. The distances between turnouts, road intersections, and turnarounds may have the length modified based on visibility and line of sight distances.
- d. Visual indicators such as reflective markers shall be located to delineate the location and extent of turnouts.



#### 1.6 Aerial Fire Apparatus Access Road Widths

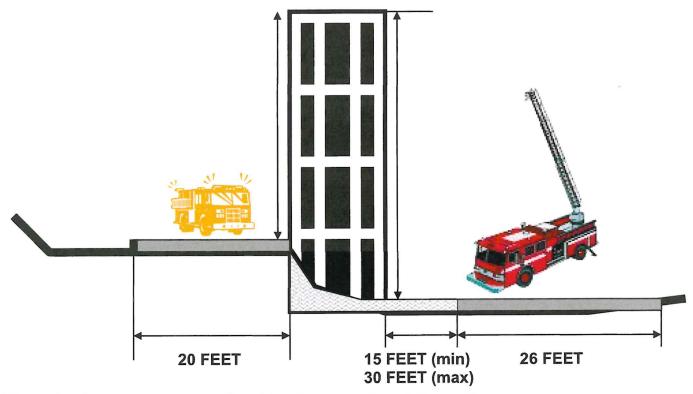
#### Requirement:

Buildings or portions of buildings or facilities exceeding 30 feet in height as measured above the lowest level of fire department vehicle access shall have fire apparatus access roads constructed for use by aerial apparatus. **Oregon Fire Code Chapter 5** 

#### Specifications:

Refer to **Oregon Fire Code Appendix D** for specifications.

- 1. Fire apparatus access roads shall have an unobstructed driving surface width of not less than 26 feet and shall be in the immediate vicinity of any building or portion of building that is more than 30 feet in height.
- 2. At least one of the required fire apparatus access roads shall be located within a minimum of 15 feet and a maximum of 30 feet from the building and shall be positioned parallel to one entire side of the building.
- 3. Overhead utility and power lines shall not be located within the aerial fire apparatus access roadway.



#### 1.7 Fire Apparatus Access Road Surfaces and Load Capacities

#### Requirement:

Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all-weather driving capabilities. **Oregon Fire Code Chapter 5** 

#### Specifications:

Refer to **Oregon Fire Code Appendix D** for specifications.

- 1. Fire apparatus access roads shall be constructed of an all-weather surface (asphalt, concrete or other approved driving surface) that meets the following:
  - a. Easily distinguishable from the surrounding area by markings acceptable to the fire code official. Markings may include plantings, signs, or other arrangements acceptable to delineate the limits of fire access driving surfaces.
  - b. Capable of supporting not less than a 75,000-pound live load (gross vehicle weight).
  - c. The weight limit specified in section 1(b) above may be increased based upon the actual weight of fire apparatus vehicles serving the jurisdiction which provides structural fire protection services to the location.
- 2. Point loads may also need to be considered when designing fire apparatus access roads due to fire operations involving aerial fire apparatus which require the use of specialized jacking pads and outriggers.
- 3. The designed capacity of private roads and driveways must be documented in writing and shall be included with site plans and/or civil drawings.
- 4. Fire Apparatus Access Roads must be constructed and maintained as designed. An on-site inspection may be required by the fire code official and shall be performed by a registered design professional whenever conditions warrant.

#### 1.8 Fire Apparatus Access Road Dead-Ends and Turnarounds

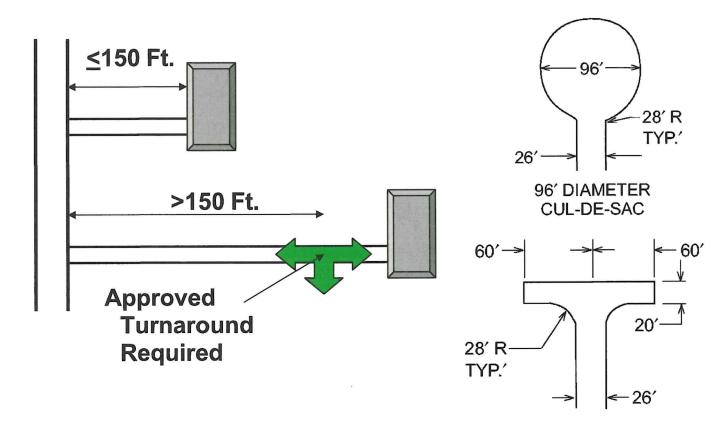
#### Requirement:

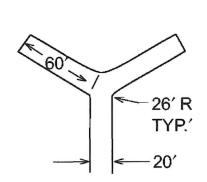
Dead-end fire apparatus access roads in excess of 150 feet in length shall be provided with an approved area for turning around fire apparatus. **Oregon Fire Code Chapter 5** 

#### Specifications:

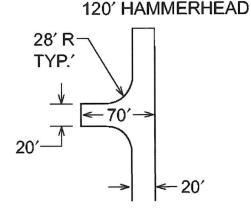
Refer to **Oregon Fire Code Appendix D** for specifications.

An approved turnaround is required if the remaining distance to an approved intersecting roadway, as measured along the fire apparatus access road, is greater than 150 feet.





ACCEPTABLE ALTERNATIVE TO 120' HAMMERHEAD



ACCEPTABLE ALTERNATIVE TO 120' HAMMERHEAD

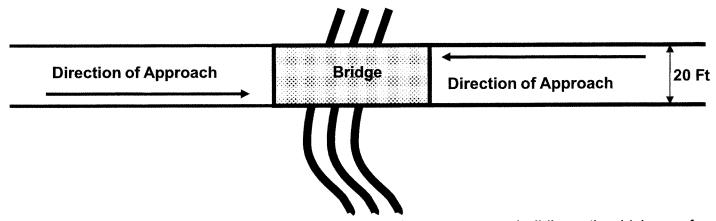
#### 1.9 Bridges & Elevated Surfaces

#### Requirement:

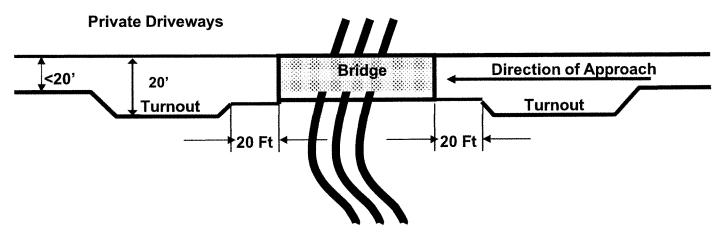
Bridges that are part of fire apparatus access roads shall be constructed and maintained in accordance with AASHTO (American Association of State Highway and Transportation Officials) Standard Specification for Highway Bridges. **Oregon Fire Code Chapter 5** 

#### **Specifications:**

1. Bridges shall be not less than 20 feet in drivable width.



**EXCEPTION**: When serving two or less dwelling units or accessory buildings, the driving surface may be reduced to a width per the AHJ. Vehicle turnouts shall be constructed adjacent to bridges. Turnouts shall be located not less than 20 feet from each end of the bridge for cueing of fire vehicles that must cross.



- 2. All bridges shall be designed for a live load sufficient to carry the imposed loads of fire apparatus in accordance with this document.
- 3. Newly constructed bridges shall be designed by a registered design professional.
- 4. Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces which are not designed for such use, approved barriers, approved signs or both shall be installed and maintained to delineate the drivable surface. Where signs are required, they shall comply with the current *Manual on Uniform Traffic Control Devices* adopted by the State of Oregon.
- 5. Maintenance of existing bridges and elevated surfaces shall be the responsibility of the person or persons that have ownership of the bridge or elevated surface.

#### 1.10 Fire Apparatus Access Road Grades and Angles of Approach & Departure

#### Requirement:

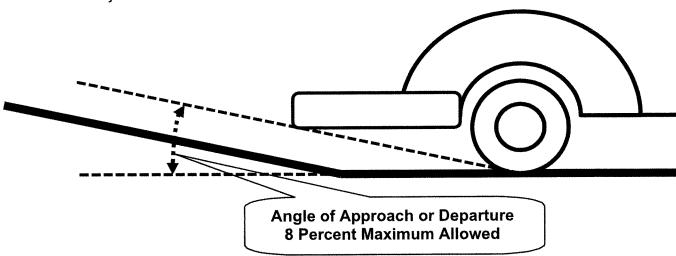
The maximum grade for all fire apparatus access road shall be within the limits established by the fire code official. **Oregon Fire Code Chapter 5** 

#### **Specifications:**

1. Maximum grade on fire apparatus access roads shall not exceed 10 percent.

**EXCEPTION**: Where grades exceed 10 percent, the fire code official is authorized to accept, under the provisions of ORS 455.610(6):

- Up to 12 percent: Paved road surface.
- Up to 15 percent: Paved road surface and an automatic fire sprinkler system installed in accordance with the provisions of **Oregon Fire Code Chapter 9**. Fire code officials may accept other alternative fire protection features.
- Grades that exceed 15 percent: Paved road surface and an automatic fire sprinkler system installed in accordance with the provisions of **Oregon Fire Code Chapter 9**. A deed as called out in Section 1.2 of this document will apply.
- 2. Intersections, turnarounds, and water bars shall be essentially level with crowning allowed for water run-off (maximum of 5 percent grade allowed).
- 3. Angles of approach and departure at the interface to and from fire apparatus access roads and where grades change shall be not more than 8 percent or as required by the design of responding fire apparatus, determined by the local fire authority. The angle shall be measured from the adjacent road surface.



#### 1.11 Fire Apparatus Access Road Turning Radius

#### Requirement:

All fire department apparatus access roads shall be constructed with respect for the anticipated fire apparatus vehicles that will provide emergency services to the specific location under consideration. The turning radius for access roads shall be as determined by the fire code official. **Oregon Fire Code Chapter 5** 

#### **Specifications:**

Refer to Oregon Fire Code Appendix D for specifications.

- 1. The minimum inside turning radius shall not be less than 28 feet.
- 2. The minimum outside turning radius shall not be less than 48 feet (min. 96-foot diameter).

3. Both the inside and outside turning radius shall be measured from the same center point.

#### 1.12 Gates on Fire Apparatus Access Roads

#### Requirement:

The fire code official is authorized to require the installation and maintenance of gates or other approved barricades across fire apparatus access roads. **Oregon Fire Code Chapter 5** 

#### **Specifications:**

Refer to **Oregon Fire Code Appendix D** for specifications.

- 1. Gates shall be a minimum width of 20 feet wide (12 feet wide for divided roads).
- 2. Gates shall be of either the swinging or sliding type and may be either a single or double section.
- 3. Gates shall not reduce the minimum required width of the access road width when in a fully open position.
- 4. Gates that are power operated shall require the installation of a means to open the gate when there is a loss of power to the gate operating device. Gates shall be constructed to allow manual operation by a single person.
- 5. Gates and barricades shall be secured in an approved manner.
  - Gates secured with padlocks or chains and padlocks shall be capable of being opened by means of an approved lock or key box containing keys to the padlocks is installed at the gate location. As approved by the AHJ.
  - Where powered security gates are installed, they shall have an approved means of emergency operation as per the AHJ. The gates and their emergency operation shall be maintained operational at all times.
  - All security devices shall allow opening without undue delay of fire apparatus during emergencies.
- 6. Gates shall be set back from roadways not less than 30 feet and shall swing into the roadway that it serves.
- 7. Gates installed on private driveways, fire lanes, and other fire apparatus access roads shall not cause cross traffic to stop or create a hazardous traffic condition on the roadway when the access road is occupied by emergency apparatus or other large vehicles.
- 8. Gates components shall be maintained in an operative condition at all times and replaced or repaired when defective.

#### 1.13 No Parking Signs & Painted Curbs

#### Requirement:

Approved signs shall be provided for fire apparatus access roads to identify such roads or to prohibit the obstruction thereof. Fire apparatus access roads shall be marked in an approved manner as specified by the fire code official and in accordance with this section. **Oregon Fire Chapter 5** 

#### Specifications:

Signs shall comply with the current *Manual on Uniform Traffic Control Devices* adopted by the State of Oregon. Below are examples of acceptable signage. Signs shall meet the specifications for the R7 series and shall have red writing on a white reflective background.

Signs shall be a minimum size of not less than 12 inches by 18 inches.

Signs shall be constructed of 0.080 thickness aluminum.

Reflective sheeting shall be high intensity prismatic or better.

Signs or markings shall be maintained in a clean and legible condition at all times and shall be replaced or repaired when necessary to provide adequate visibility.

#### **Examples of Fire Lane Signs**



Other marking methods may be applied where approved by the fire code official.

Fire Lane or other fire operational area curbs, where required, shall be marked as follows:

- Curbs shall be painted per the specification of the AHJ or local ordinances.
- Curbs shall have the words, "Fire Lane, No Parking" stenciled and shall be legible and contrast with the background color.

#### 1.14 Fire Apparatus Access Roads during Construction Operations

#### Requirement:

Fire apparatus access shall be provided by either temporary or permanent roads, capable of supporting vehicle loading under all weather conditions. **Oregon Fire Code Chapter 33** 

#### Specifications:

- 1. Approved vehicle access for firefighting shall be provided to all construction or demolition sites. Vehicle access shall be provided to within 100 feet of temporary or permanent fire department connections.
- 2. Fire apparatus access roads shall be approved by the fire code official prior to beginning construction or demolition of buildings. Roads shall meet the requirements of this document.
- 3. Vehicle access shall be maintained until permanent fire apparatus access roads are available.

#### **SECTION 2: WATER SUPPLIES FOR SUPPRESSION OF FIRES**

#### 2.1 Definitions

The definitions included in this section are to assist the reader with understanding terms that are used when fire flow requirements apply to buildings and facilities. Terms include those from the Oregon Fire Code as well as terms that are used in this document.

- 1. Adequate And Reliable. The fire flow rate as measured when water is flowing at not less than 1,500 gallons per minute and at not less than 20 pounds per square inch (psi) residual pressure.
- 2. **Fire Flow.** The flow rate of a water supply, measured at not less than 20 pounds per square inch (psi) residual pressure that is available for fighting fires.
- 3. **Protected Areas.** Geographic areas where a service or an agency has been established for the purposes of providing fire suppression services for buildings and other structures. Examples of agencies typically include public fire departments, rural fire protection districts, and private fire protection services.
- 4. **Fire Area** The living portion of a residence, plus attached garage/shop, covered porches/decks, usable attic, or basement space (capable of storage or future living area) shall constitute the total fire area in square feet.

# 2.2 Fire Flow Requirements for Buildings in Protected Areas WITHOUT Adequate and Reliable Water Systems

#### Requirement:

For residential dwellings with fire areas of 3,600 square feet or more, an approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises upon which facilities, buildings or portions of buildings are hereafter constructed or moved into or within the jurisdiction. **Oregon Fire Code Chapter 5** 

#### Specifications:

Refer to **Oregon Fire Code Appendix B** for specifications.

- 1. The provisions of **OFC Appendix section B107** are intended for use by the fire code official in protected areas in which adequate and reliable water supply systems do not exist or where water supply systems are incapable of meeting the provisions specified in this document.
- 2. When determining the fire flow for buildings in these areas, the fire code official is authorized to utilize any of the following nationally recognized methods:
  - NFPA 1142, Standard on Water Supplies for Suburban and Rural Fire Fighting, 2022
     Edition.
  - The International Wildland Urban Interface Code; 2021 Edition.
  - ISO (Insurance Services Office) Document for Determining Needed Fire Flow, 2014 Edition.

#### Uniform Alternate Construction Standard (UACS) for One- and Two-Family Dwellings:

The Fire code Official has the authority to recognize alternative and equivalent methods and materials of design related to access and water supply as outlined in Chapter 1 or the Oregon Fire Code (Duties and Powers of the Fire Code Official). This references provisions of OAR 918-480-0125(4)(a-e): NFPA Standard 13D fire suppression systems, installation of additional layers of 5/8 inch Type-X gypsum, fire-resistive compartmentalization of dwelling fire areas, fire resistive exterior wall and roofing components, and/or fire separation containment in accordance with the default standards of the Wildland-Urban Interface rules (OAR 629-044-1060).

#### AM&M Specifications for separation of fire areas (no more than 3,599 sq. ft areas):

Fire separation achieved by two layers of 5/8 inch Type-X gypsum from foundation to roofline on one side of the separation, managing for all penetrations as appropriate (electrical/conduit/caulking, plumbing/caulking, HVAC/dampers, etc.). Doors utilized for access between spaces shall be 45-minute fire rated and self-closing. All AM&M specifications must be approved by the Building Official as recommended by the Fire Official.

# 2.3 <u>Fire Flow Requirements for Buildings in Protected Areas WITH Adequate and Reliable Water Systems</u>

#### Requirement:

An approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises upon which facilities, buildings or portions of buildings are hereafter constructed or moved into or within the jurisdiction. **Oregon Fire Code Chapter 5** 

#### **Specifications:**

Refer to **Oregon Fire Code Appendix B** for specifications.

- 1. The provisions of the Oregon Fire Code Appendix B shall apply to those areas where fire hydrants and water supply systems are present and that are capable of meeting the minimum specified fire flows specified as follows:
  - a. In areas with one- and two-family dwellings (Group R-3) only, the minimum fire flow shall be not less than 1,000 gallons per minute at not less than 20 pounds per square inch residual.
  - b. In areas with buildings and/or facilities (other than one- and two-family dwellings, Group R-3), the minimum fire flow shall be not less than 1,500 gallons per minute at not less than 20 pounds per square inch residual.
- 2. In all areas, fire flows may be reduced when automatic fire sprinkler systems and/or fire alarm systems are installed where otherwise not required by code or regulation. Reductions shall be in accordance with **Oregon Fire Code Appendix B**.
- 3. Based upon the type of occupancy (use) of buildings, the fire code official may modify fire flows in accordance with **Oregon Fire Code Appendix B**.
- 4. The fire code official may require limitations to fire flows for buildings and facilities where the development of fire flows in excess of 3,000 gallons per minute at not less than 20 pounds per square inch residual, are considered impractical. In such cases, the fire code official may be documented by **Oregon Fire Code Appendix B**.

#### 2.4 Water Supply during Construction or Demolition Operations

#### Requirement:

An approved water supply for fire protection, either temporary or permanent, shall be made available as soon as combustible material arrives on construction sites. **Oregon Fire Code Chapter 33** 

#### **Specifications:**

- 1. Fire protection water supplies shall be approved by the fire code official prior to the beginning of combustible construction of or demolition to buildings.
- 2. Fire protection water supplies shall meet the requirements of this document.

# SECTION 3: FIRE HYDRANTS AND FIRE DEPARTMENT CONNECTIONS

#### 3.1 Fire Hydrants and Fire Department Connections

#### Requirement:

Fire hydrants and fire department connections shall comply with the Oregon Fire Code as approved by the AHJ. **Oregon Fire Code Chapter 5** 

#### 3.2 Fire Hydrant Location and Distribution

#### Requirement:

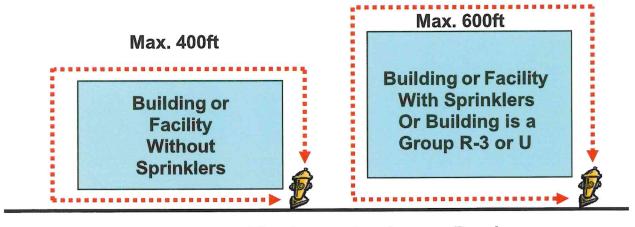
Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet from a hydrant on a fire apparatus access road, as measure by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided.

#### Oregon Fire Code Chapter 5

#### Specifications:

Refer to OFC Appendix C for specifications.

- 1. Fire hydrants shall be provided along required fire apparatus access roads and adjacent public streets as required by the fire code official.
- 2. Where dwellings (Group R-3) or utility (Group U) structures only are located such as in residential subdivisions, the distance from a hydrant shall be not more than 600 feet.
- 3. Where buildings are equipped throughout with an approved automatic fire sprinkler system installed to either NFPA 13 or NFPA 13R, the distance from a fire hydrant shall be not more than 600 feet.
- 4. The number of fire hydrants available including consideration of existing fire hydrants, shall be in accordance with **Oregon Fire Code Appendix C**.
- 5. Distribution of fire hydrants shall be in accordance with Oregon Fire Code Appendix C.



Fire Apparatus Access Road

#### **SECTION 4: OTHER FIRE SERVICE FEATURES**

#### 4.1 Premises Identification

#### Requirement:

New and existing buildings shall have approved address numbers, building numbers or other approved building identification. Streets and roads shall be identified with approved signs. **Oregon Fire Code Chapter 5** 

#### 4.2 Key Boxes

#### Requirement:

Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for lifesaving or fire-fighting purposes, the fire code official is authorized to require a key box to be installed. **Oregon Fire Code Chapter 5** 

#### 4.3 Fire Department Access to Equipment

#### Requirement:

Fire protection equipment shall be identified in an approved manner. **Oregon Fire Code Chapter** 5

#### **APPENDIX A-1: JURISDICTION CONTACT INFORMATION**

These are the addresses for the local and state fire code officials in Linn and Benton Counties. The development of this document is a joint effort among the listed jurisdictions.

	<b>Benton County Fire Districts &amp; Fire Departments</b>		
	Adair RFPD		541-745-7212
	Alsea RFPD		541-487-8701
	Blodgett Sum	nmit RFPD	541-453-4406
	Corvallis FD		541-766-6961
	Hoskins-King	s Valley RFPD	541-929-2111
	Monroe RFPI	D	541-847-5170
	Philomath F&	kR	541-360-0032
	Albany FD		541-917-7700
Benton County:		<b>Building Division</b>	541-766-6819
		Planning Division	541-766-6819
City of Adair:		Building Department	541-766-6819
		Planning Department	541-766-6819
City of Alsea:		Building Department	541-766-6819
		Planning Department	541-766-6819
City of Blodgett-Summit:		<b>Building Department</b>	541-766-6819
		Planning Department	541-766-6819
City of Corvallis:		Development Services	541-766-6929
		Planning Division	541-766-6908
City of Hoskins-Kings Valley:		Building Department	541-766-6819
		Planning Department	541-766-6819
City of Monroe:		<b>Building Department</b>	541-766-6819
		Planning Department	541-766-6819
City of Philomath:		<b>Building Department</b>	541-929-6148
		Planning Department	541-929-6148
Oregon State Fire M	Marshal Office		
Jason Cane, Regional Supervising Deputy			503-507-4495

#### **Linn County Fire Districts & Fire Departments**

	Albany FD		541-917-7700
	Brownsville F	RFD	541-466-5227
	Halsey-Shed	d RFPD	541-369-2419
	Harrisburg F	&R	541-995-6412
	Idanha Detro	it RFPD	503-854-3540
	Jefferson RF	PD	541-327-2822
	Lebanon FD		541-451-1901
	Lyons RFPD		503-859-2410
	Mill City RFP	D	503-897-2390
	Scio RFPD		503-394-3000
	Stayton RFP	D	503-769-2601
	Sweet Home	Fire & Ambulance	541-367-5882
	Tangent RFF	סי	541-928-8722
Linn County:		<b>Building Codes Division</b>	541-967-3816
City of Albany:		<b>Building Department</b>	541-917-7553
City of Brownsville:		<b>Building Department</b>	541-967-3816
City of Halsey - She	dd:	<b>Building Department</b>	541-967-3816
City of Harrisburg		<b>Building Department</b>	541-967-3816
City of Lebanon:		<b>Building Department</b>	541-258-4906
City of Lyons:		<b>Building Department</b>	541-967-3816
City of Scio		<b>Building Department</b>	541-967-3816
City of Sweet Home	į	<b>Building Department</b>	541-367-8113
City of Tangent		<b>Building Department</b>	541-223-3312



# Fire Authority Plan Review Verification

Applicant Information

Building Department Use On
----------------------------

Permit Number _		
Date		

**Permit Information** 

### Final Inspection(s): Access and Water Supply

Name	Tax Lot Number		
Mailing Address	Project Address:		
City/State/ZIP			
Phone Number			
Email Address			
Condition(s)	Condition(s) Completed (Date)		
1.			
2.			
3.			
4.			
Notes	Fire Authority Approval		
Notes			
Notes	By:		
Notes			
Notes	Ву:		
Notes	By:		

Building finals will not be approved without sign off from the local fire authority stating all conditions have been met.

# ACCESS AND WATER SUPPLY WORKSHEET

#### THIS SECTION IS MEANT TO SERVE AS INFORMATION IN THE COMPLETION OF THE WORKSHEET

Residential, Commercial, and Agricultural structures SHALL provide reliable water and sufficient access to responding emergency vehicles. This code requirement falls under the Authority Having Jurisdiction (AHJ) being the Fire Department (FD) which has the heaviest and longest emergency response vehicles. Fire Safety & Life Safety is afforded to all within the State of Oregon, and FD Access & Water Supply is the minimal standard before any project begins. Access and Water Supply is required **during** the Land Development stage and addressed **before** designing the site and structure. The Fire Department has weight, length, height, width, and elevation requirements for their vehicles.

Water is the tool of choice for fighting fires. Firefighters require a reliable source of water for firefighting activities that protect them from fire, support life rescue operations, minimize property losses, and protects the community from fire spread. Reliable water sources are normally in the form of fire hydrants; however, some projects are outside of a municipal water grid. In support of allowing structures out of reach from the grid, the fire department allows for a source of water to be established on the property to supply the firefighters and equipment, for a minimum amount of time, based upon the location and size of the fire area. Well water can be used to supply the amount of water required even though their gallons per minute is insufficient to supply firefighting equipment directly.

This water supply is required for the entire life of the structure, or until a reliable water source or grid becomes available near-by.

All projects receive an access and water supply review, in which requirements may be made by the local Fire Authority. Alternate methods and materials (AM&M) may be submitted to the local Fire Authority for consideration. AM&M's for lots created on or after July 2, 2001 will require the Building Official's approval during building permit plans review. Make sure all AM&M's effecting the building plans are reflected accurately and included in the building design. Any changes to the project after the plans review has been completed must be resubmitted and reviewed for compliance and approval.

When filling out the worksheet, please be thorough with the requested information as the information will aid the local Fire Authority in the access and water supply review of the project. Each project is reviewed independently and is in no way precedent-setting on future projects. Please consult your local Fire Authority if you have any questions. Please include the following documents with this worksheet:

- A site plan that clearly identifies road width and segment lengths (as applicable), grades, turnout(s) as applicable, turnaround as applicable, and location of any bridge/culvert.
- A floor plan for the dwelling indicating total sq. ft. of living area, covered porch(es) or deck(s), attached garage/shop, attic/basement, etc. If using a separation wall, indicate proposed location(s) and specifications.

#### **LINN-BENTON FIRE PROTECTION GUIDE:**

FIRE AUTHORITY NOTES/CONDITIONS:

https://v	/www.philomathfire.com/files/d7641c375/Linn+Benton+Fire+Protection+Guide+20230316.pdf
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16	5 March 2023





Building	Department	Use	Only
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Permit number:\_\_\_\_\_

Date:\_\_\_\_\_

# LINN-BENTON FIRE AUTHORITY

MARCERS	WMW	WATER	CIIDDII V	Y WORKSH	15155
CO C	AINIE		90115		

APPLICANT INFORMATION	PERMIT INFORMATION	
NAME:	TAX LOT  NUMBER:  PROJECT ADDRESS:	
basement and/or attic space if capable of storage or future living area.  NEW CONSTRUCTION  N/A	ADDITION/REMODEL N/A	
LIVING AREA:SQFT	EXISTING FIRE AREA:SQFT	
COVERED PORCH OR DECK:SQFT	NEW LIVING AREA:SQFT	
GARAGE/SHOP (ATTACHED):SQFT	NEW COVERED PORCH OR DECK:SQFT	
OTHER SPACE (ATTIC/BASEMENT):SQFT	NEW GARAGE/SHOP (ATTACHED):SQFT	
TOTAL FIRE AREA:SQFT	NEW OTHER SPACE (ATTIC/BASEMENT):SQFT	
ACCESS	UPDATED FIRE AREA:SQFT	
NUMBER OF BUILDINGS ON ACCESS:	WATER SUPPLY	
APPROACH IS 8 PERCENT OR LESS YES NO	Building Construction Type-The type of framing or support members	
WIDTH:FT (MIN PER AHJ:FT)	Building Construction Types:	
LENGTH:FT HEIGHT:FT	1-Fire Resistive 2-Non-Combustible	
GRADE:% (As measured at 25' increments)	3-Ordinary (Masonry) 4-Heavy Timber	
TURN OUTS REQD (>400')? YES NO	5-Wood Framed (Typical Residential Home)	
75,000 # LOAD? ROCK? PAVED? TURN AROUND WITHIN 50FT OF THE BUILDING YES NO N/A	BUILDING CONSTRUCTION TYPE: OTHER BUILDINGS CLOSER THAN 50FT? YES NO IF YES: USE? CU FT: BUILDING HEIGHT TO THE PEAK: FT	
TURN AROUND DESIGN	BUILDING HEIGHT TO THE EAVES:FT.	
Y T MODT CULDESAC LOOP	CEILING HEIGHT: FT. ATTIC HEIGHT: FT. ATTIC TYPE: STANDARD GAMBREL/MANSARD	
IS THERE A BRIDGE OR CULVERT WITHIN THE ACCESS?  NO YES Oregon Engineer #:	RESIDENTIAL FIRE SPRINKLERS PROPOSED IN BUILDING PLAN? YES NO	
FIRE AUTHO	RITY USE ONLY	
RECEIVED: SITE VISIT? 114	2 CALCULATED GALLONS:	
AM&M: YES NO CONDITIONAL: YES NO FIRE AUTHORITY SIGNATURE:		