

Exhibit N



APPROVED
City of Florence
Community Development
Department
N
Exhibit PC 20.31 SUB 03
File Number

Siuslaw Valley Fire and Rescue

2625 Highway 101 North
Florence, OR 97439-9702

(541) 997-3212

02/12/2021

City of Florence

Three Mile Prairie Tentative Subdivision PC 18 49 SUB 03

On behalf of Western Lane Ambulance (WLA) & Siuslaw Valley Fire & Rescue (SVFR), the proposed tentative subdivision will need to comply with 2019 Oregon Fire Code Appendix D. Special attention to highlighted Sections D102, D103, D106, and D107. Fire hydrants will be approved by Public Works and meet requirements established in 2019 Oregon Fire Code Appendix C (See Table C102.1 for reference).

SECTION D102 REQUIRED ACCESS

D102.1 Access and loading. Facilities, buildings, or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an approved fire apparatus access road with an asphalt, concrete or other approved driving surface capable of supporting the imposed load of fire apparatus weighing up to 75,000 pounds (34 050 kg).

Exception: The minimum weight specified in Section D102.1 may be increased by the fire code official based on the actual weight of fire apparatus vehicles serving the jurisdiction that provides structural fire protection services to the location, including fire apparatus vehicles that respond under automatic and mutual aid agreements.

D102.1.1 Access in wildland-urban interface areas. For egress and access concerns in wildland-urban interface locations, the fire code official may be guided by the International Wildland-Urban Interface Code.

SECTION D103 MINIMUM SPECIFICATIONS

D103.1 Access road width with a hydrant. Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet (7925 mm), exclusive of shoulders (see Figure D103.1).

Exception: The fire code official is authorized to modify the provisions of Section D103.1 where:



Siuslaw Valley Fire and Rescue

2625 Highway 101 North
Florence, OR 97439-9702

(541) 997-3212

1. All one- and two-family dwellings located along the narrowed fire apparatus access road are protected with an approved automatic fire sprinkler system.
2. Provisions are made for the emergency use of sidewalks by such means as rolled or mountable curbs capable of supporting the fire department's apparatus.
3. Streets or roadways are identified for one-way circulating flow of traffic, or pullouts are provided every 150 feet (45 720 mm) on streets or roadways identified for two-way traffic.
4. A grid system for traffic flow is provided and streets or roadways in the grid do not exceed 300 feet (91 400 mm) in length and are accessible at each end from approved access roadways or streets.

D103.2 Grade. Fire apparatus access roads shall not exceed 10 percent in grade.

Exception: Grades steeper than 10 percent as approved by the fire code official.

D103.3 Turning radius. The minimum turning radius shall be determined by the fire code official.

D103.3.1 Drainage. Where subject to run-off damage, the fire code official is authorized to require approved drainage.

D103.4 Dead ends. Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) shall be provided with width and turnaround provisions in accordance with Table D103.4.

TABLE D103.4 REQUIREMENTS FOR DEAD-END FIRE APPARATUS ROADS

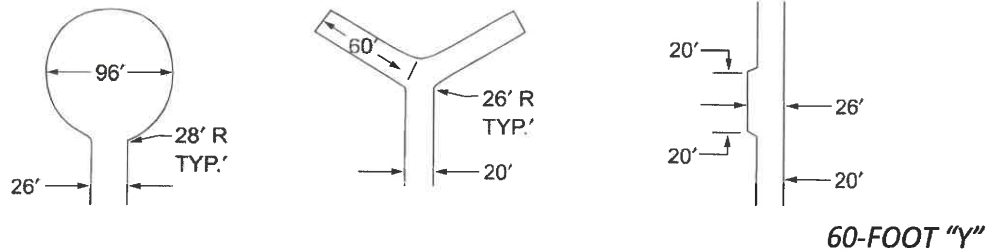
LENGTH (feet)	WIDTH (feet)	TURNAROUNDS REQUIRED
0–150	20	None required
151–500	20	120-foot Hammerhead, 60-foot “Y” or 96-foot diameter cul-de-sac in accordance with Figure D103.1
501–750	26	120-foot Hammerhead, 60-foot “Y” or 96-foot diameter cul-de-sac in accordance with Figure D103.1
Over 750	Special approval required	



Siuslaw Valley Fire and Rescue

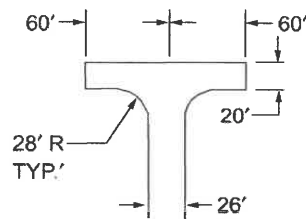
2625 Highway 101 North
 Florence, OR 97439-9702

(541) 997-3212

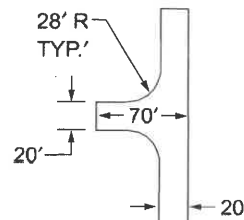


MINIMUM CLEARANCE AROUND A FIRE HYDRANT

96' DIAMETER
 CUL-DE-SAC



120' HAMMERHEAD



ACCEPTABLE ALTERNATIVE
 TO 120' HAMMERHEAD

For SI: 1 foot = 304.8 mm.

FIGURE D103.1 DEAD-END FIRE APPARATUS ACCESS ROAD TURNAROUND

D103.5 Fire apparatus access road gates. Gates securing the fire apparatus access roads shall comply with all of the following criteria:

1. Where a single gate is provided, the gate width shall be not less than 20 feet (6096 mm). Where a fire apparatus road consists of a divided roadway, the gate width shall be not less than 12 feet (3658 mm).
2. Gates shall be of the swinging or sliding type.
3. Construction of gates shall be of materials that allow manual operation by one person.



Siuslaw Valley Fire and Rescue

2625 Highway 101 North
Florence, OR 97439-9702

(541) 997-3212

4. Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.
5. Electric gates shall be equipped with a means of opening the gate by fire department personnel for emergency access. Emergency opening devices shall be approved by the fire code official.
6. Methods of locking shall be submitted for approval by the fire code official.
7. Electric gate operators, where provided, shall be listed in accordance with UL 325.
8. Gates intended for automatic operation shall be designed, constructed, and installed to comply with the requirements of ASTM F2200.

D103.6 Signs. Where required by the fire code official, fire apparatus access roads shall be marked with permanent NO PARKING—FIRE LANE signs complying with Figure D103.6. Signs shall have a minimum dimension of 12 inches (305 mm) wide by 18 inches (457 mm) high and have red letters on a white reflective background. Signs shall be posted on one or both sides of the fire apparatus road as required by Section D103.6.1 or D103.6.2.

D103.6.1 Roads 20 to 26 feet in width. Fire lane signs as specified in Section D103.6 shall be posted on both sides of fire apparatus access roads that are 20 to 26 feet wide (6096 to 7925 mm).

D103.6.2 Roads more than 26 feet in width. Fire lane signs as specified in Section D103.6 shall be posted on one side of fire apparatus access roads more than 26 feet wide (7925 mm) and less than 32 feet wide (9754 mm).

SECTION D104 COMMERCIAL AND INDUSTRIAL DEVELOPMENTS

D104.1 Buildings exceeding three stories or 30 feet in height. Buildings or facilities exceeding 30 feet (9144 mm) or three stories in height shall have not fewer than two means of fire apparatus access for each structure.

D104.2 Buildings exceeding 62,000 square feet in area. Buildings or facilities having a gross building area of more than 62,000 square feet (5760 m²) shall be provided with two separate and approved fire apparatus access roads.

Exception: Projects having a gross building area of up to 124,000 square feet (11 520 m²) that have a single approved fire apparatus access road where all buildings are equipped throughout with approved automatic sprinkler systems.

D104.3 Remoteness. Where two fire apparatus access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the lot or area to be served, measured in a straight line between accesses.



Siuslaw Valley Fire and Rescue

2625 Highway 101 North
Florence, OR 97439-9702

(541) 997-3212

SECTION D106 MULTIPLE-FAMILY RESIDENTIAL DEVELOPMENTS

D106.1 Projects having more than 100 dwelling units. Multiple-family residential projects having more than 100 dwelling units shall be equipped throughout with two separate and approved fire apparatus access roads.

Exception: Projects having up to 200 dwelling units shall have not fewer than one approved fire apparatus access road where all buildings, including nonresidential occupancies, are equipped throughout with approved automatic sprinkler systems installed in accordance with Section 903.3.1.1 or 903.3.1.2.

D106.2 Projects having more than 200 dwelling units. Multiple-family residential projects having more than 200 dwelling units shall be provided with two separate and approved fire apparatus access roads regardless of whether they are equipped with an approved automatic sprinkler system.

D106.3 Remoteness. Where two fire apparatus access roads are required, they 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.

SECTION D107 ONE- OR TWO-FAMILY RESIDENTIAL DEVELOPMENTS

D107.1 One- or two-family dwelling residential developments. Developments of one- or two-family dwellings where the number of dwelling units exceeds 30 shall be provided with two separate and approved fire apparatus access roads.

Exceptions:

1. Where there are more than 30 dwelling units on a single public or private fire apparatus access road and all dwelling units are equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3, access from two directions shall not be required.
2. The number of dwelling units on 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.

D107.2 Remoteness. Where two fire apparatus access roads are required, they 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.



Siuslaw Valley Fire and Rescue

2625 Highway 101 North
Florence, OR 97439-9702

(541) 997-3212

TABLE C102.1

REQUIRED NUMBER AND SPACING OF FIRE HYDRANTS^h

FIRE-FLOW REQUIREMENT (gpm)	MINIMUM NUMBER OF HYDRANTS	AVERAGE SPACING BETWEEN HYDRANTS^{a, b, c, f, g} (ft)	MAXIMUM DISTANCE FROM ANYPOINT ON STREET OR ROAD FRONTAGE TO A HYDRANT^{d, f, g}
1,750 or less	1	500	250
1,751–2,250	2	450	225
2,251–2,750	3	450	225
2,751–3,250	3	400	225
3,251–4,000	4	350	210
4,001–5,000	5	300	180
5,001–5,500	6	300	180
5,501–6,000	6	250	150
6,001–7,000	7	250	150
7,001 or more	8 or more ^e	200	120

For SI: 1 foot = 304.8 mm, 1 gallon per minute = 3.785 L/m.

- a. Reduce by 100 feet for dead-end streets or roads.
- b. Where streets are provided with median dividers that cannot be crossed by fire fighters pulling hose lines, or where arterial streets are provided with four or more traffic lanes and have a traffic count of more than 30,000 vehicles per day, hydrant spacing shall average 500 feet on each side of the street and be arranged on an alternating basis.
- c. Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants shall be provided at spacing not to exceed 1,000 feet to provide for transportation hazards.
- d. Reduce by 50 feet for dead-end streets or roads.
- e. One hydrant for each 1,000 gallons per minute or fraction thereof.
- f. A 50-percent spacing increase shall be permitted where the building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 of the International Fire Code.



Siuslaw Valley Fire and Rescue

2625 Highway 101 North
Florence, OR 97439-9702

(541) 997-3212

- g. A 25-percent spacing increase shall be permitted where the building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.2 or 903.3.1.3 of the International Fire Code or Section P2904 of the International Residential Code.*
- h. The fire code official is authorized to modify the location, number and distribution of fire hydrants based on site-specific constraints and hazards.*

User note:

Previous editions of Table C102.1 had large gaps between fire-flow requirements. These gaps provided the fire code official with discretion based on site-specific considerations. "Note h" provides that same discretion based on the jurisdiction's determination that conditions particular to a location justify either an increase or a decrease in the number of hydrants, or a change in their arrangement. Any decreases in the general fire protection scheme should take into account possible future development that may occur.

Any comments, questions, or concerns can be direct to:

Tony Miller

Fire Marshal

Siuslaw Valley Fire & Rescue

2625 Hwy 101, Florence, OR 97439

(541) 997-3212

tony@wlfea.org