



Red Oak Fire Rescue

Fire Marshal's Office

547 N. Methodist St.

Red Oak, Texas 75154

Phone (469) 218-7713 Direct (469) 218-7712

Fax (469) 218-7719

www.redoakfirerescue.com



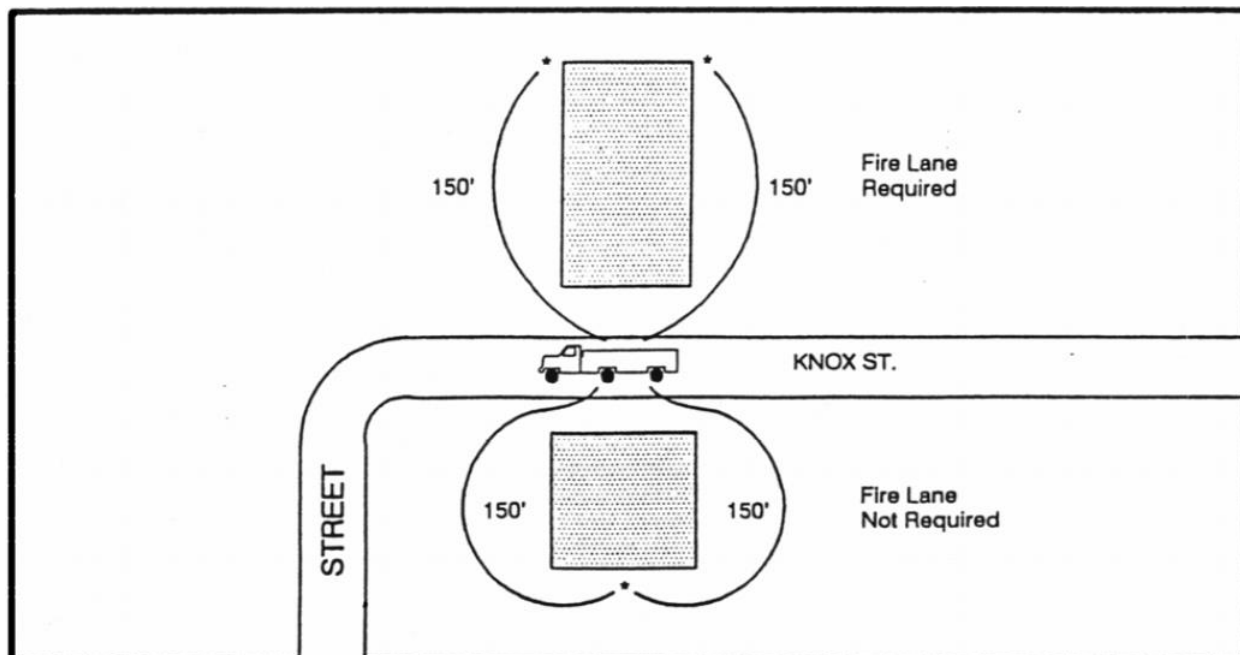
Fire Lane Requirements

(Section 503, 2018 International Fire Code)

To provide adequate emergency vehicle access, (Fire, Police, Ambulance), and to give the Citizens of Red Oak the best possible emergency response time, it is necessary that all required Fire Lanes be installed and accepted before any construction goes above the slab.

General - Fire Lanes are required to be installed and maintained in accordance with the Fire Code. All fire lanes shall be approved by the Fire Marshal and plans shall be submitted for approval prior to starting construction of any building where fire lanes are required. **No one shall mark, post, or otherwise identify a non-fire lane street, whether public or private, as a fire lane.**

Where Required - All buildings or structures shall be constructed in such a way that all ground level, exterior sides of the building are within one hundred fifty feet (150') of the dedicated street or fire lane, measured by the route necessary to extend firefighting hose lines around the building. If the one hundred fifty feet (150') cannot be reached from a public street, a fire lane will be required on site.



Exceptions: The Fire Code Official is authorized to increase the dimension of 150 feet where:

1. The building is equipped throughout with an approved automatic sprinkler system.
2. Fire lanes cannot be installed due to topography, waterways, non-negotiable grades or other similar conditions, and an approved alternative means of fire protection is provided.
3. There are not more than two (2) Group R-3 or Group U occupancies.
4. When a building is provided with a complete automatic fire sprinkler system and the building exceeds one hundred fifty feet (150') in length or width on any side, a fire lane or dedicated street shall be within one hundred fifty feet (150') of the entire length of one of the longest sides of the building.

Surface - Fire lanes shall be provided with a concrete or asphalt surface to provide all-weather driving capabilities and shall be constructed to support the imposed weight of an 80,000 pound vehicle.

Vertical Clearance - All fire lanes shall have a vertical clearance of not less than fourteen feet (14'). This height is required for a fire truck to pass under.

Width - The minimum unobstructed width of a fire lane shall be not less than twenty-four feet (24'). This is required for two fire trucks to pass in case of an emergency.

Turning Radius - All fire lanes shall have at least a thirty foot (30') inside turning radius and at least a fifty-four foot (54') outside turning radius.

Grade - The gradient for a fire lane serving a building not protected throughout by a complete automatic sprinkler system shall not exceed eight percent (8%).

Bridges and elevated surfaces - Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with AASHTO Standard Specification for Highway Bridges.

Gates - All gates across streets or fire lane access must meet the approval of the Fire Marshal and Building Department. Plans should be submitted to the Fire Marshal and approved prior to a permit being taken out with the Building Inspections Department. Security gates shall be maintained and an approved means of emergency operation shall be provided and maintained. An Opticom receiver and Knox key switch is required at all new installations of security gates across streets or fire lanes at apartments, subdivisions, and other locations as required by the Fire Code Official.

Turn-Around Areas - When it is not possible to connect a fire lane at both ends to a dedicated street, an approved turn-around shall be provided. Dead-end fire lanes shall not exceed one hundred fifty feet (150') in length. Illustrations of approved turn-around arrangements are as follows:

Exceptions: The Fire Code Official is authorized to increase the dimension of 150 feet where:

5. The building is equipped throughout with an approved automatic sprinkler system.
6. Fire lanes cannot be installed due to topography, waterways, non-negotiable grades or other similar conditions, and an approved alternative means of fire protection is provided.
7. There are not more than two (2) Group R-3 or Group U occupancies.
8. When a building is provided with a complete automatic fire sprinkler system and the building exceeds one hundred fifty feet (150') in length or width on any side, a fire lane or dedicated street shall be within one hundred fifty feet (150') of the entire length of one of the longest sides of the building.

Surface - Fire lanes shall be provided with a concrete or asphalt surface to provide all-weather driving capabilities and shall be constructed to support the imposed weight of an 80,000 pound vehicle.

Vertical Clearance - All fire lanes shall have a vertical clearance of not less than fourteen feet (14'). This height is required for a fire truck to pass under.

Width - The minimum unobstructed width of a fire lane shall be not less than twenty-four feet (24'). This is required for two fire trucks to pass in case of an emergency.

Turning Radius - All fire lanes shall have at least a thirty foot (30') inside turning radius and at least a fifty-four foot (54') outside turning radius.

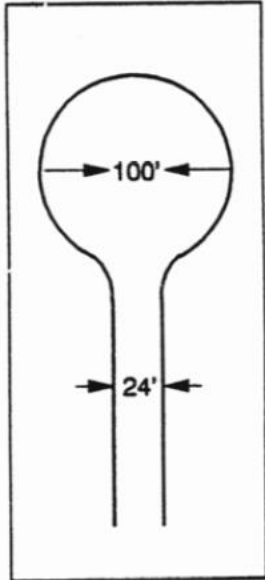
Grade - The gradient for a fire lane serving a building not protected throughout by a complete automatic sprinkler system shall not exceed eight percent (8%).

Bridges and elevated surfaces - Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with AASHTO Standard Specification for Highway Bridges.

Gates - All gates across streets or fire lane access must meet the approval of the Fire Marshal and Building Department. Plans should be submitted to the Fire Marshal and approved prior to a permit being taken out with the Building Inspections Department. Security gates shall be maintained and an approved means of emergency operation shall be provided and maintained. An Opticom receiver and Knox key switch is required at all new installations of security gates across streets or fire lanes at apartments, subdivisions, and other locations as required by the Fire Code Official.

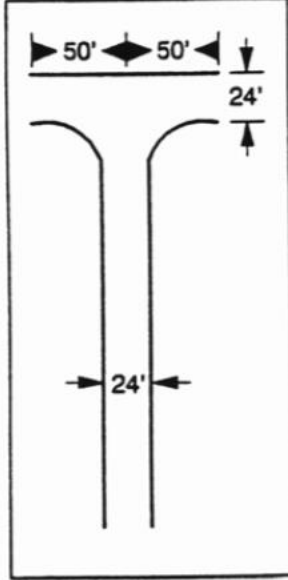
Turn-Around Areas - When it is not possible to connect a fire lane at both ends to a dedicated street, an approved turn-around shall be provided. Dead-end fire lanes shall not exceed one hundred fifty feet (150') in length. Illustrations of approved turn-around arrangements are as follows:

Figure 1



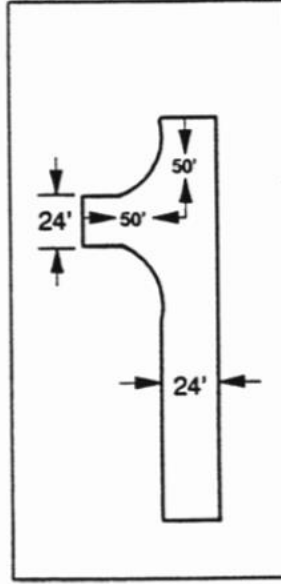
100' Diameter Circle

Figure 2



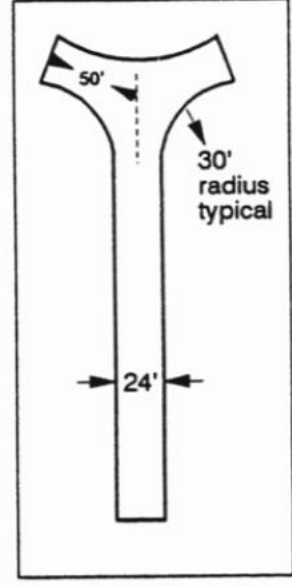
100' Hammerhead

Figure 3



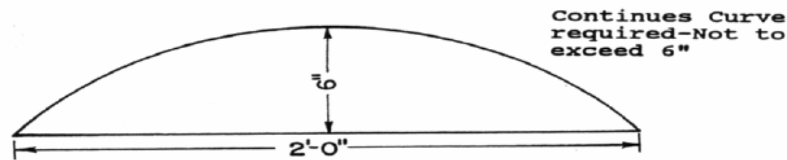
Acceptable Alternative to 100' Hammerhead

Figure 4



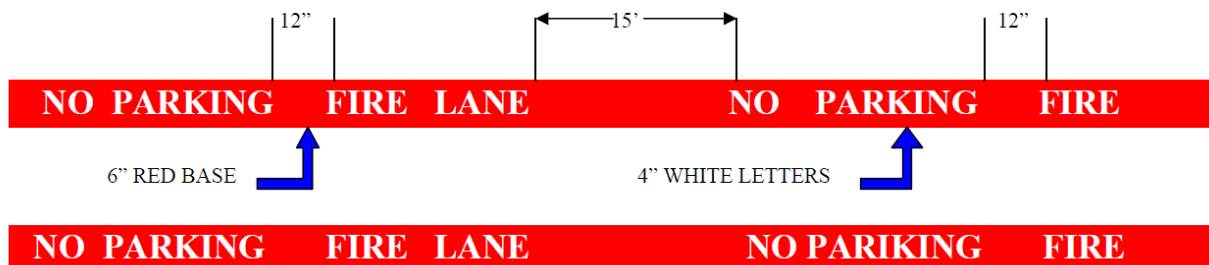
Acceptable Alternative to 100' Hammerhead

Obstruction - The required fire lane width shall not be obstructed by the parking of vehicles, or in any other manner. Speedbumps or other similar obstacles that have the effect of slowing or impeding the response of fire apparatus shall be approved by the Fire Marshal prior to installation. The following is an example of an acceptable speed bump.



Signs - If the Fire Chief or authorized representative determines that other means of notice are ineffective to designate a fire lane, signs may be required by written notice to the property owner.

Striping - All required fire lanes shall be provided and maintained with fire lane striping that consists of a six inch (6") wide red background stripe with four inch (4") high white letters stating "No Parking, Fire Lane" to be painted upon the red stripe every fifteen feet (15') along the entire length of the fire lane showing the exact boundary of the fire lane. Fire lane markings shall be upon the vertical surface of the curb, unless otherwise approved by the Fire Chief or authorized representative. Illustration of approved fire lane markings is as follows:



1. **NO PARKING FIRE LANE** TO BE PAINTED ENTIRE LENGTH OF DEDICATED FIRE LANE.
2. FIRE LANE MARKINGS SHALL BE PLACED UPON THE VERTICAL SURFACE OF CURBS.
3. WHERE THE ABOVE FIRE LANE MARKINGS ARE DETERMINED TO BE INADEQUATE IN CONTROLLING TRAFFIC, THE PROPERTY OWNER WILL BE REQUIRED TO POST FIRE LANE SIGNS IN ADDITION TO OTHER MARKINGS.
4. WHEN RESTRIPIING, ADDITIONS TO THE EXISTING FIRE LANES ARE NOT ALLOWED WITHOUT PRIOR APPROVAL OF THE FIRE DEPARTMENT.

Maintenance - All designated fire lanes shall be maintained and kept in a state of good repair at all times by the owner or person in control of the premises.

Modifications - Fire lanes for high-pile combustible storage shall comply with Section 3206.6, 2018 International Fire Code. **[High-piled combustible storage – is combustible materials in closely packed piles or combustible materials on pallets or in racks more than twelve feet (12') in height. For certain special-hazard commodities such as rubber tires, plastics, some flammable liquids, idle pallets, etc., the critical pile height may be as low as six feet (6')].**