



These guidelines are intended to be resource for when a building, structure, or facility, within the City of Rockwall, is required to be provided with fire apparatus access roads or emergency access easement, commonly referred to as “Fire Lane” for Fire Department Access.

All fire lanes for the purposes of these guidelines and any other guidelines or requirements of the Rockwall Fire Prevention Education and Investigation (FPE&I) Division shall conform to the 2021 International Fire Code, as adopted and amended by the City of Rockwall.

### Fire Access Road Locations

- 1) Approved, unobstructed fire department access (fire lanes) shall be provided such that all portions of the exterior of the building shall be within 150-feet (as the hose lays) of a fire lane and/or other approved fire apparatus access roadway. The path of measurement shall be along a minimum of a 10-foot wide unobstructed pathway around the external walls of the structure. (Obstructions include AC units, shrubs, trees, gates, or other construction or utilities.) **(See Figure 1)**  
**Exception:** The fire code official is authorized to increase the dimension of 150 feet where any of the following conditions occur:
  - (1) The building is equipped throughout with an approved automatic sprinkler system installed in accordance with NFPA 13, NFPA 13R, NFPA 13D.
  - (2) Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and an approved alternative means of fire protection is provided.
  - (3) There are not more than two Group R-3 or Group U occupancies.
- 2) Two means of fire apparatus access shall be provided for the following:
  - a) Buildings or facilities exceeding 30-feet or three stories in height.
  - b) 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 when all buildings are equipped throughout with approved automatic sprinkler systems.)
  - c) Multiple-family residential projects having more than 100 dwelling units.  
(Exception: Projects having up to 200 dwelling units may have a single approved fire apparatus access road when all buildings, including nonresidential occupancies, are equipped throughout with approved automatic sprinkler systems.)
  - d) Multiple-family residential projects having more than 200 dwelling units.
  - e) One- or two-family dwelling developments where the number of dwelling units exceeds 30.  
(Exception: 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 of the International Fire Code, access from two directions shall not be required.)
- 3) 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 or as otherwise approved by the fire code official.

### Fire Lane Specifications

- 4) Where the vertical distance between the grade plane and the highest roof surface exceeds 30 feet (9144 mm), approved aerial fire apparatus access roads shall be provided.
- 5) Fire lanes width will be measured face of curb to face of curb (FC-FC).
- 6) Fire lanes shall have:
  - a. width of 24 feet.



- 7) For buildings less than 30-feet and less than 3 stories in height:
  - a. 20-feet (inside) for turns less than or equal to 90 degrees
  - b. 25-feet (inside) for turns greater than 90 degrees
- 8) For buildings 30 feet or more and/or 3 or more stories in height minimum interior turning radius of 30 feet.
  - a. Minimum clear vertical height clearance of 14 feet unless otherwise approved by Fire Chief.
  - b. Fire lane cannot exceed 10% in grade change, with cross slope not exceeding 5%.
- 9) The angles of approach and departure for fire apparatus access roads shall not exceed 7 degrees or (12%) or as approved by the Fire Chief.
- 10) Fire apparatus access roads shall be designed in accordance with the City of Rockwall Engineering Standards and maintained to support the imposed loads of 85,000lbs of fire apparatus and shall be surfaced so as to provide all-weather driving capabilities.

### **Marking (See Figure 2)**

- 11) Striping — Fire apparatus access roads shall be marked by painted lines of red traffic paint six inches (6”) in width to show the boundaries of the lane. The words “NO PARKING FIRE LANE” or “FIRE LANE NO PARKING” shall appear in four inch (4”) white letters at 25-foot intervals on the red border markings along both sides of the fire lanes. Where a curb is available, the striping shall be on both the vertical and horizontal faces of the curb.
- 12) Signs — Signs shall read “NO PARKING FIRE LANE” or “FIRE LANE NO PARKING” and shall be 12” wide and 18” high. Signs shall be painted on a white background with letters and borders in red, using not less than 2” lettering. Signs shall be permanently affixed to a stationary post and the bottom of the sign shall be six feet, six inches (6’6”) above finished grade. Signs shall be spaced not more than fifty feet (50’) apart. Signs may be installed on permanent buildings or walls or as approved by the Fire Chief.

### **Fire Lane Turnarounds (See Figure 3)**

- 13) An approved turnaround must be provided for all dead-end fire access roads in excess of 150-foot in length. Unless specifically approved by the Fire Department, parking or other obstruction within the required turnarounds is prohibited.
- 14) All approved turnarounds shall be marked and platted as fire lanes.
- 15) All Cul-De-Sacs that are considered Fire Lane shall have a 48-foot minimum radius/ 96-foot diameter. Corner radius shall be per the fire lane width required.

### **Traffic Calming Devices**

- 16) Speed bumps or other similar obstacles that have the effect of slowing or impeding the response of fire apparatus shall be approved by the Fire Code Official.

### **Fire Apparatus Access Roads during Construction**

- 17) Approved vehicle access for firefighting shall be provided to all construction or demolition sites. Vehicle access shall be provided to within 100 feet (30 480 mm) of temporary or permanent fire department connections. Vehicle access shall be provided by either temporary or permanent roads, capable of supporting vehicle loading under all weather conditions. Vehicle access shall be maintained until permanent fire apparatus access roads are available.
- 18) Markings shall be in compliance with 11 & 12 as indicated above or as otherwise approved by the fire code official.



**Plan Review**

- 19) Fire lanes shall be indicated on the plat as an easement. Where fire lanes are provided and a plat is not required, the limits of the fire lane shall be shown on a site plan.



Figure 1 – Fire Lane 150 ft. Rule Example

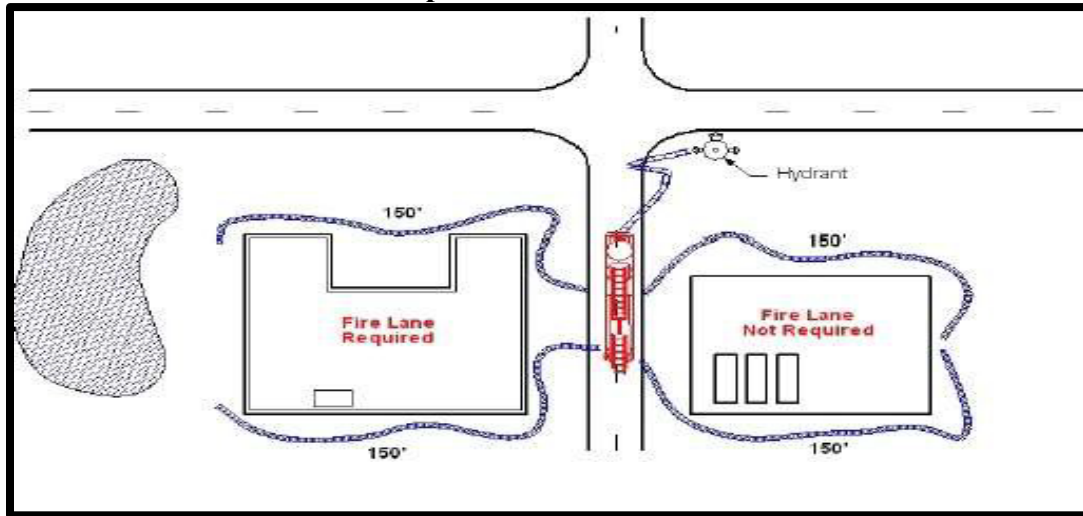


Figure 2 – Fire Lane Markings

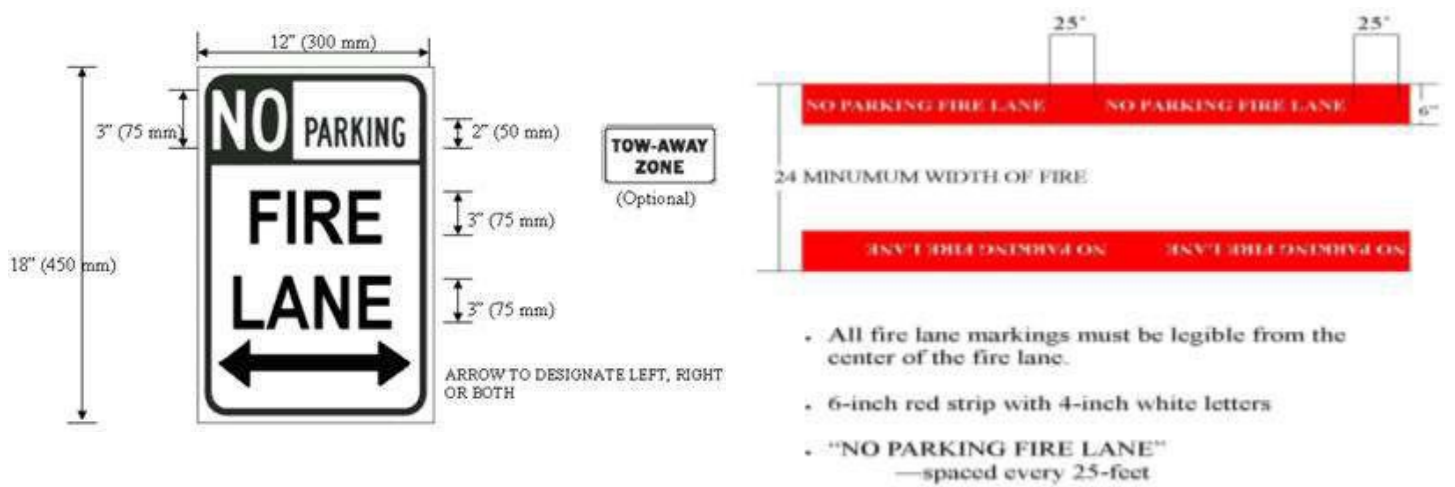




Figure 3 – Approved Fire Lane Turn-around

