

City of Sunland Park

Fire Department

Memorandum

Date:	November 5, 2020
То:	All Concerned Personnel
From:	Fire Chief Daniel Medrano
Subject:	Fire Lane Requirements

The purpose of this memorandum is to outline the Sunland Park Fire Department's policies, procedures, requirements and local fire code interpretations pertaining to the approved methods of marking fire apparatus access roads. It is not the intent of this document to reiterate fire code requirements but to provide an administrative ruling that provides a reference for consistency of the application of the fire code. In all cases, unless otherwise addressed in this memorandum, the 2015 International Fire Code (IFC) will apply. This document applies to any and all roadways that are designated as fire lanes. This includes but is not limited to private roadways, driveways and some public streets.

Fire Lane Marking Requirements

Sunland Park Fire Department



If you have any questions or comments regarding the information contained within, or if you need assistance interpreting these requirements, please contact

Sunland Park Fire Department 1000 McNutt Rd. Sunland Park, NM 88064 575-268-6224

Revised November 2020

FIRE LANE MARKINGS WHERE REQUIRED

The IFC requires a minimum 20-ft clear width for fire department access roads. Therefore, a fire department access road without parking may be 20-ft wide. When parking is desired, the width of the access roadway increases to accommodate the parking. The amount of roadway width needed for parking along one side of an access road is 8-ft. in order to provide a minimum 20-ft clear width for fire department use, the access road must then be a minimum of 28-ft. 8-ft for the parking and 20-ft for the clear width.

When parking on both sides of the access roadway is desired, the roadway width for parking is reduced to 7-ft. The thought for this reduction is that vehicles will park closer to the curb when parking along both sides of an access road. This results in an access road of 34-ft in width overall. 7-ft each for parking along both curb lines, which totals to 14-ft, plus 20-ft for the clear width. See figures 1 through 4 for illustrations of this theory.

It is important to remember that these are the minimum requirements for fire apparatus access road markings. There may be circumstances in which additional markings are required. These circumstances are evaluated on a case-by-case basis. Markings are also required for certain fire apparatus access features such as turnarounds. Please contact the Sunland Park Fire Department if it is felt that a situation might call for different marking arrangements.

- On both sides of fire department access roadways twenty-six feet (26') wide or less.
- On one side of fire department access roadways with widths greater than twenty-six feet (26') up to and including thirty-two feet (32').

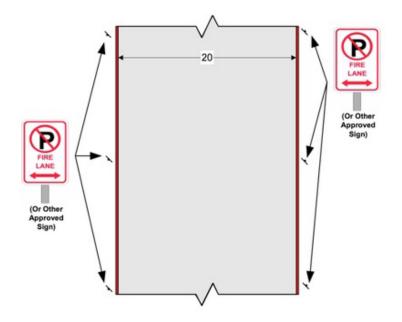


Figure 1 – Access road with no parking permitted

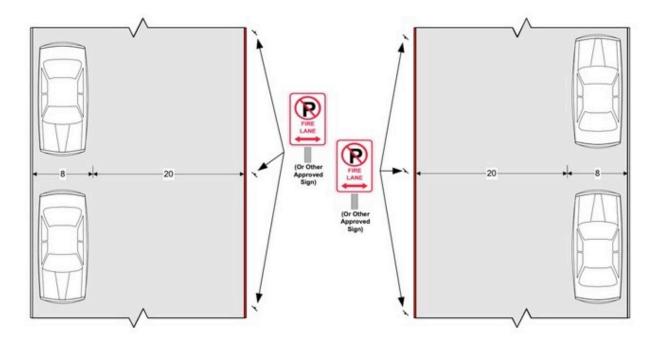


Figure 2 – Access roads with parking along one side

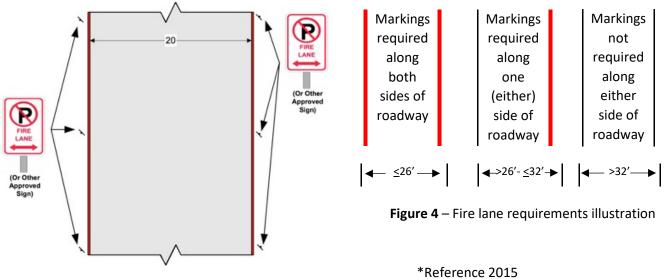


Figure 3 – Access roads with parking along both sides

*Reference 2015 International Fire Code Section D103.6 • 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. See figure 5.

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

- The building is equipped throughout with an approved automatic sprinkler system.
- Fire lanes cannot be installed due to topography, waterways, non-negotiable grades or other similar conditions, and an approve alternative means of fire protection is provided.
- There are no more than two (2) Group R-3 or Group U occupancies.
- 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.

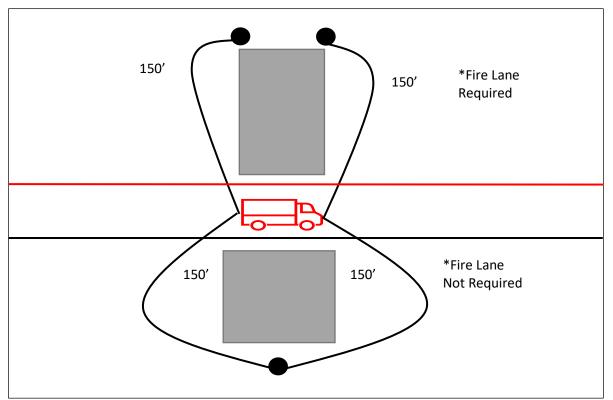


Figure 5 – Fire lane requirements for buildings with limited access for fire hose

FIRE LANE MARKING REQUIREMENTS FOR VARIOUS FD TURNAROUNDS

When a fire department turnaround is required for a given site, the turnaround shall be marked as indicated in Figure 6. Note that both fire land signage and fire lane striping is shown. This if for illustration purposes only. Either the signage or striping is required. However, both methods may be used is desired.

The entrance to a fire department turnaround will be marked differently depending upon the width of the roadway entering into the turnaround which may or may not be based on the zone of the site.

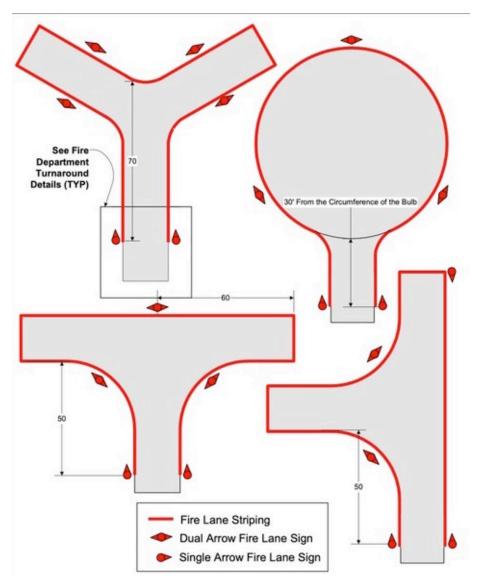


Figure 6 – Fire lane marking requirements for various FD turnarounds

FIRE LANE REQUIREMENTS

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 a 60,000-pound vehicle.

Vertical Clearance – All fire lanes shall have a vertical clearance of not less than thirteen feet six inches (13'6"). This height is required for a fire truck to pass under.

Width – The minimum unobstructed width of a fire lane shall be not less the twenty feet (20'). This is required for two fire trucks to pass in case of an emergency.

Grade – The gradient for a fire lane serving a building not protected throughout by a complete automatic sprinkler system shall not exceed ten percent (10%).

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

Fire Hydrants – All designated fire lanes must provide fire department access to all on-site fire hydrants.

Fire Suppression Systems – All designated fire lanes must provide fire department access to within fifty feet (50') of sprinkler and standpipe connections.

Striping Requirements

Design – When striping is used to identify fire apparatus access roads, the striping shall comply with Figures 7 and 8. All striping used for marking of fire lanes must meet the following criteria:

- 6-inch red traffic paint stripe
- 4-inch white reflective lettering/wording with ¾-inch stroke stating "No Parking Fire Lane"
- Lettering/wording spaced every 25 feet



Figure 7 – Fire Lane striping example

Installations – The stripping must be placed along the entire length of the fire lane. When no curb is available, the red stripe is placed directly on the roadway. When curbing is available, the red stripe is place on the curb face and top of curb. It is important to note that currently, the use of striping for fire lane markings is limited to private roadways. The use of striping noted here is not permitted for use on public roadways.



Figure 8 – Typical fire lane striping installation

Signage combined with striping – When striping with the required lettering is provided, signage is not required. However, if the red striping without the required lettering is installed, approved fire lane signage is required. The marking must identify the zone as a fire lane. The red striping alone does not do this, hence the requirement of the signage. Therefore, when marking a fire lane, the required lettering is typically provided with the red striping to prevent additional costs from signage installations.

Plan Submittals for Review Requirements – Where applicable, fire lanes must be identified on all site plans or development plans. This is accomplished by identifying every curb or side of roadway that will incorporate fire lane markings whether signage or striping. Individual signage locations are not required. The extent of the markings must also be identified. Many times, the fire lane will start/stop mid-curb. The plans must identify the location of this start/stop. Typically, a hatched line would then indicate the curb(s) to be marked as well as the extents of the fire lane. See Figure 9 for an example of this identification.

FIRE LANE PLACEMENT CONSIDERATIONS

Coordination with fire hydrants – The placement of fire lanes should be coordinated with the placement of fire hydrants. This is particularly true when only one side of the roadway requires fire lane marking. By placing the fire lane on the same side of the road as the fire hydrants, the fire hydrants are then provided with an increased level of protection from obstruction-by-parking.

Fire lanes behind parking – For most instances, when perpendicular and/or parallel parking is provided along both sides of a drive, fire lane marking is not required behind such parking. There are of course some instances in which marking are required and it is the fire lane striping that is used for marking. This is most commonly required when the drive lane, narrower than normal, is accompanied with perpendicular parking. In this situation, care must be taken to ensure vehicles parking do not overhang into the already narrow fire lane.

Single points of access – When a site is provided with a single point of access, that single point of access may require fire lane markings along both sides regardless of the width of the access. This is determined

on a case-by-case basis and a site use plays a significant role in this determination. Higher risk uses will typically drive marking both sides of single access points over lower risk hazards.

Additional fire lane markings – There may be other instances in which additional fire lane markings are required. Some of these instances include, but are not limited to, adequate room for turning maneuvers or providing access to special hazards.

SIGNAGE REQUIREMENTS

Design – When signs are used to identify fire apparatus access roads, the signs shall comply with Figure 10. All signs used for marking of fire lanes must meet the following criteria:

- Be permanent bearing the words "No Parking Fire Lane".
- Have a white reflective background with letters and borders in red, using not less than two-inch (2") lettering and have a minimum dimension of twelve inches (12") wide by eighteen inches (18") high.
- Provide directional arrows as applicable unless otherwise permitted.
- Meet applicable requirements of the Federal Highway Administration's Manual on Uniform Traffic Control Devices (MUTCD).



Figure 11 - Fire lane signage example



Figure 12 - Fire land sign alternatives

Although the crossed out "P" sign is referenced in Figure 11, the signs shown in Figure 12 are also acceptable fire lane signs. See attachment for specific wording design for signs. Fire lane signs not identified here may be submitted for review and approval. These signs must be readily identifiable as an enforcement sign that a driver may have encountered during driver lesson classes. Proposed signs that do not meet this will not be accepted. All signs must meet the R7 series sign criteria set forth by MUTCD.

Installation – When signs are used to indicate the extent of the fire lanes, the posts for the signs shall be set into solid ground at a minimum depth of 18-inches. The height of the bottom edge of the sign shall be no less than 7-feet from grade and the edge of the sign closest to the roadway shall be between 2 and 3-feet from the face of the curb or edge of the asphalt. The signs shall be affixed to heavy-duty U-channel or other approved materials, with two carriage bolts, two washers and two nuts. Signs should be set at an angle of not less that 30 degrees or more than 45 degrees with the line of traffic flow in order to be visible to approaching traffic. See Figures 13 and 14 for illustrations of these requirements.

Spacing – Fire lane signs shall be placed approximately every 100 feet (100') and at every change of roadway direction. A fire lane sign must be visible in the direction of vehicular travel, from any point along the curb of a fire lane.

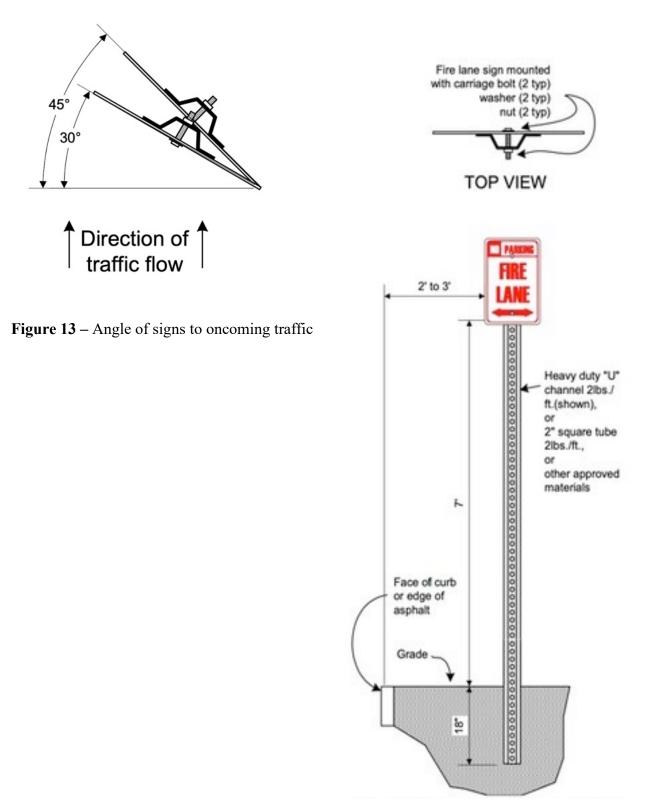


Figure 14 – Typical fire lane signage installation

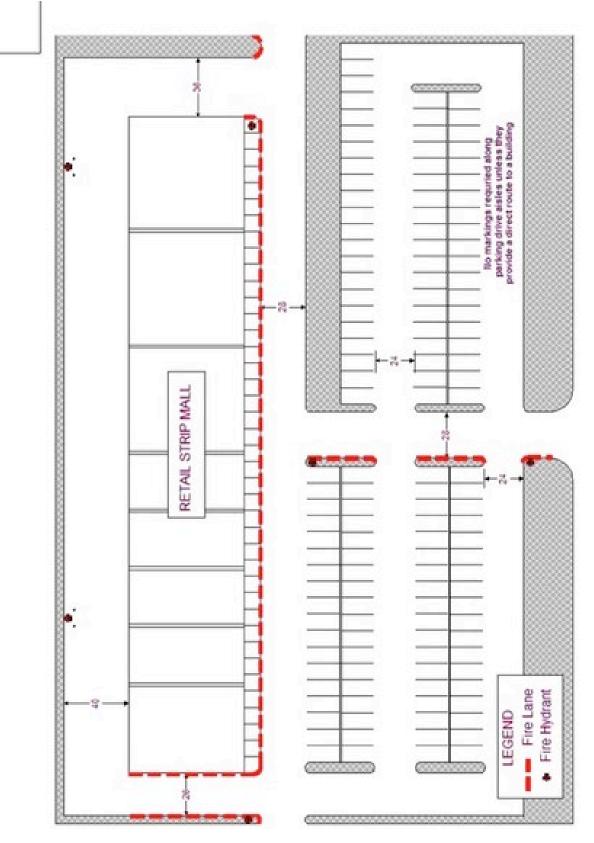


Figure 9 – Example of fire lane markings for a site plan



Figure 10 – Detailed fire lane signage design