



GRAYSON COUNTY FIRE MARSHAL'S OFFICE

Fire Lane Requirements

This guide is intended as a resource and policy statement for all new commercial buildings, and multi-family structures within the unincorporated area of Grayson County. For the purposes of these instructions and any other guidelines or requirements of the Fire Marshal's Office, fire lanes shall conform to the International Fire Code as adopted and amended by Grayson County. Questions can be directed to the Grayson County Fire Marshal's Office.

DEFINITION OF A FIRE ACCESS ROAD

1. *Fire apparatus access roads*, a general term inclusive of all other terms such as fire lane, public street, private street, parking lot lane, and access roadway, shall be provided and maintained in accordance with the International Fire Code.
2. Fire apparatus access roads are defined as a road that provides fire apparatus access from a fire station to a facility, building, subdivision, or portion thereof. Roads shall be capable of supporting fire apparatus weighing up to 85,000 lbs. A fire lane is a designated area on a road or parking lot that must be kept clear for emergency vehicles to access building, structures and pedestrians.

FIRE ACCESS ROADS REQUIRED

1. Fire lanes shall be installed and identified per requirements prior to combustible vertical construction.
2. Two (2) points of access may be required.
3. **Remoteness Requirement** - Emergency entrances 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.
** Fire Marshal is authorized to increase this distance if the building is equipped with an automatic sprinkler system or due to topography or similar conditions and an approved alternative means of fire protection is provided.
4. Approved fire apparatus access roads shall be provided for every facility, building, or portion of a building hereafter constructed or moved into or within the jurisdiction. 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 a fire hose lay (using a serpentine curved measurement; not a straight line) from a single, stationary fire apparatus around the exterior of

the building or facility. The following formula accounts for the serpentine nature of ground hose and shall be used to determine all hose lay distances:

- Two (2) independent measurements (in feet) from a single location in the center of the fire lane plus 5 feet for every 25 feet of total linear distance. {*EXAMPLES: 50 feet of linear distance = 60 feet of total distance; 100 feet of linear distance = 120 feet of total distance; 150 feet of linear distance = 180 feet of total distance*}

Exceptions:

- *The hose lay distance may be increased by the fire code official if the building is equipped throughout with an approved automatic fire sprinkler system installed per applicable codes including but not limited to NFPA 13, 13R, or 13D.*
- *The fire code official may increase the distance where 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.*

FIRE APPARATUS ACCESS ROADS DURING CONSTRUCTION

1. Temporary fire lanes shall be constructed using all-weather material.
Fire lanes shall be serviceable and continuously maintained. Construction worker vehicles and equipment may be required to park parallel on one side of the building. Consult with the Fire Marshal's Office for additional guidance.

CONSTRUCTION AND DESIGN SPECIFICATIONS

1. Fire lane width shall be measured face of curb to face of curb (FC-FC).
2. Fire lanes with a width of 24 ft. require a minimum turning radii of 30 ft.
3. All fire lanes shall be an all weather surface and installed in accordance with Grayson County requirements. Roads shall be capable of supporting apparatus weighing up to 85,000 lbs.
4. All exterior walls shall be within 150 feet of a fire lane or street measured to the center of the nearest lane. The distance may be increased with fire code official approval if the structure is equipped with an automatic fire sprinkler system.
5. Minimum unobstructed width of 24 feet.
6. Fire lanes shall not exceed 10% in grade change within the entire site plan or development.
7. 14 feet of height clearance shall exist above all fire lanes.
8. Dead end fire lanes in excess of 150 feet shall be provided with an approved turnaround. Size, type, and location of turnarounds must be approved by the Fire Marshal.

FIRE LANES

DESIGN AND SPECIFICATIONS

MARKING (See Figure 5)

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

FIRE LANE TURNAROUNDS (See Figure 4)

1. Dead-end fire lanes that exceed 150 ft. in length, shall be provided with an approved hammerhead, “Y”, or circular turnaround. Parking, median islands, landscaping or other obstruction within the required turnarounds is prohibited.
2. Circular Turnaround: 50 ft. minimum radius (100 ft. diameter). Corner radius shall be per the fire lane width required.
3. Hammerhead: 60 ft. minimum legs along the “T” or “Y”, as measured from centerline of the fire lane. Corner radius shall be per the fire lane width required.
4. Please see Figure 4 - *Approved Fire Lane Turnarounds* for representative graphics.

TRAFFIC CALMING DEVICES

1. Speed bumps or other similar obstacles that have the effect of slowing or impeding the response of fire apparatus are prohibited.

PLAN REVIEW

1. Fire lanes provided during the site plan review process shall be so indicated on the site plan as a fire lane shaded in gray or other discernible marking to indicate the fire lane. the limits of the fire lane shall be shown on the Site Plan.
 2. Fire lanes and mutual access easements shall be provided to serve all buildings through parking areas, to service entrances of buildings, loading areas and trash collection areas, and other areas deemed necessary to be available for fire and emergency vehicles. The Fire Marshal is authorized to designate additional requirements for fire lanes and/or require fire lanes where it is reasonably necessary to provide access for fire and rescue personnel, or as required by other provisions of the Fire Code.
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FIRE LANES DESIGN AND SPECIFICATIONS

FIRE LANE DIAGRAMS

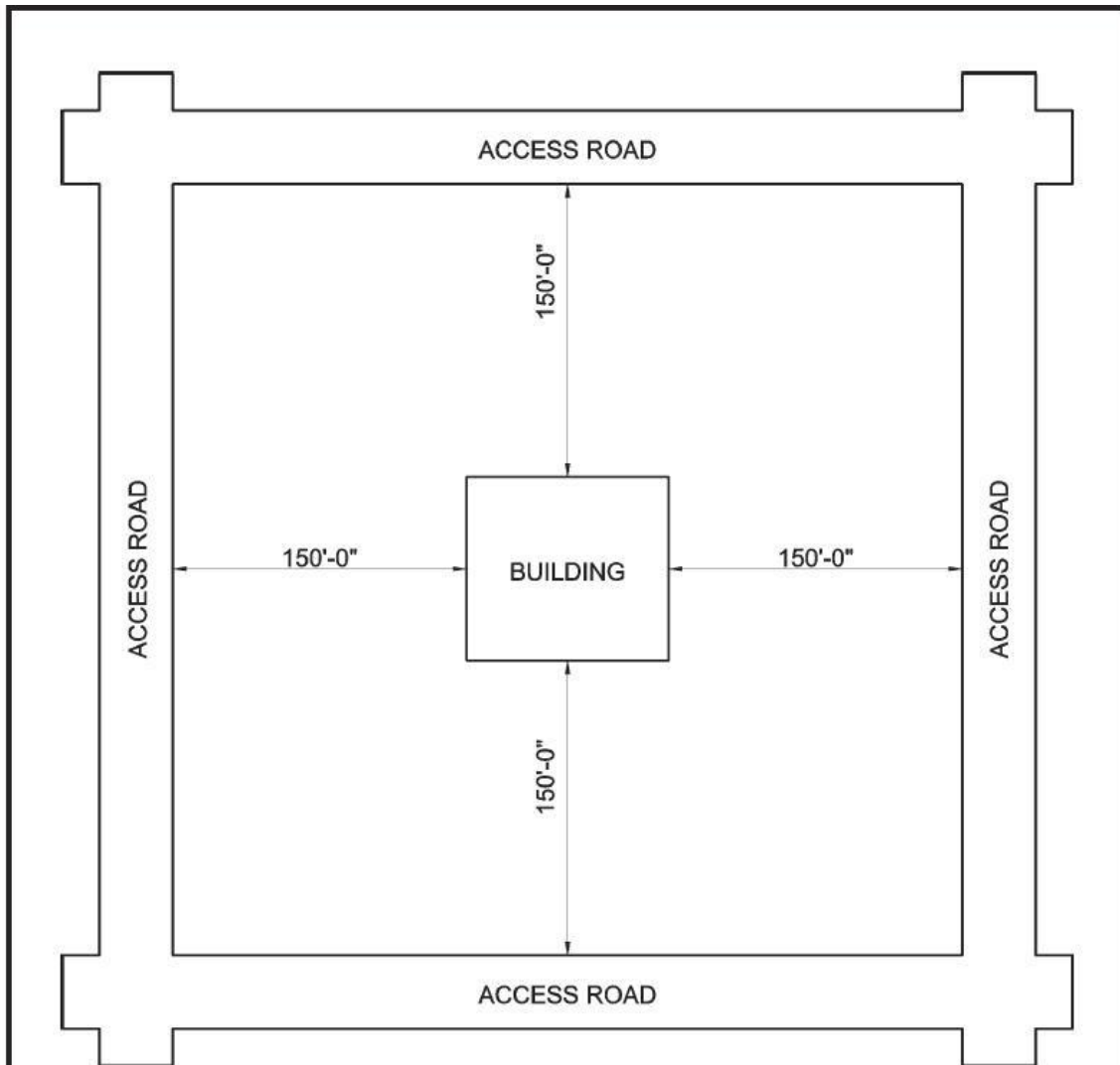
1. The following pages provide graphical guidance for the design of fire apparatus access roads.

All fire lane criteria for the purposes of this guideline and any other guidelines or requirements of the Grayson County Fire Marshal's Office shall conform to the International Fire Code, as adopted and amended by Grayson County. This guide does not replace, nor supersede any code and/or determinations and positions of the Fire Marshal.

FIRE LANES

FIRE APPARATUS ACCESS ROADS DIAGRAMS

Figure 1, Large Building



For SI: 1 foot = 304.8 mm.

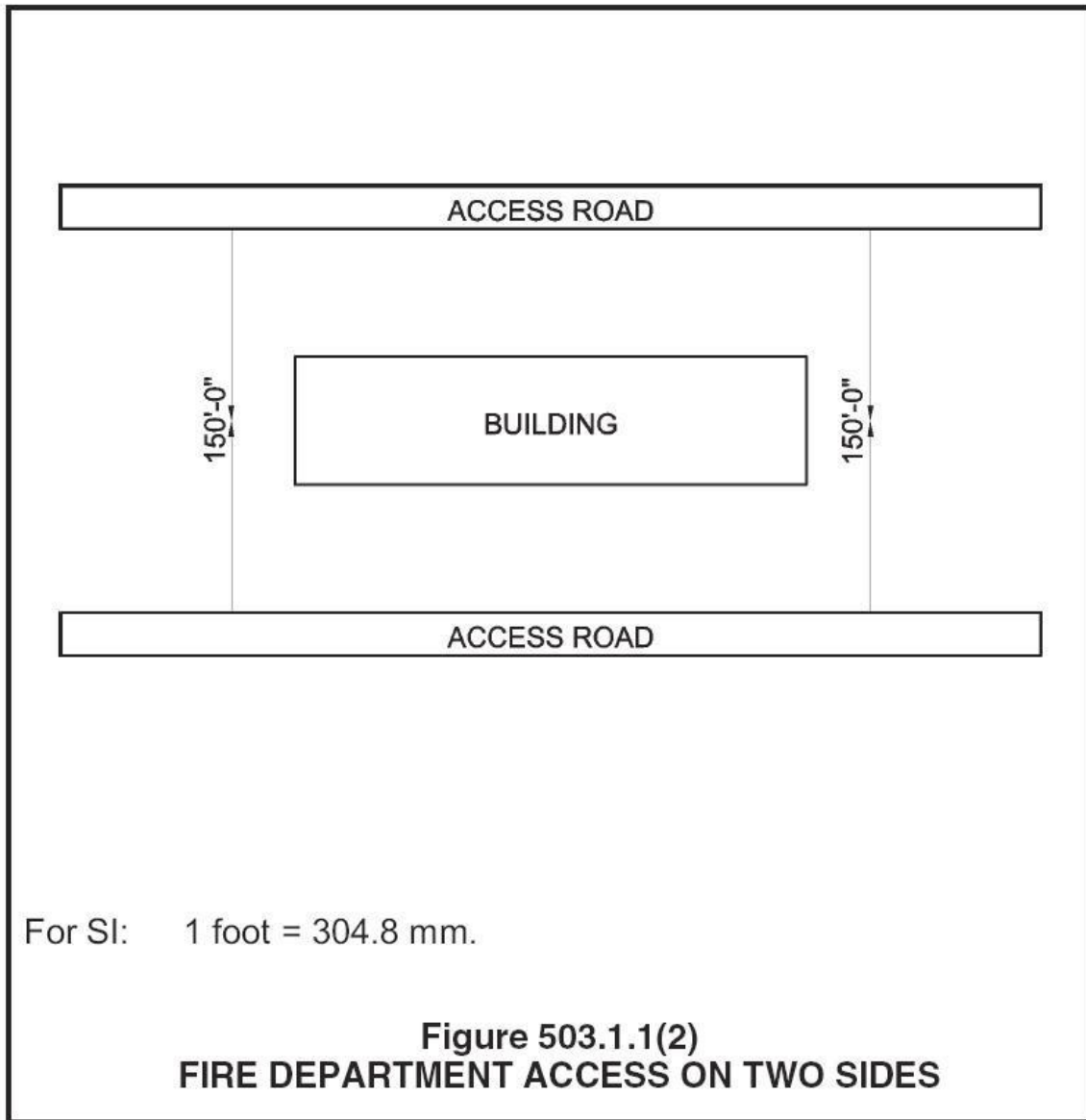
Figure 503.1.1(1)
FIRE DEPARTMENT ACCESS—LARGE BUILDING

NOT TO SCALE

FIRE LANES

FIRE APPARATUS ACCESS ROADS DIAGRAMS

Figure 2, Two Sides

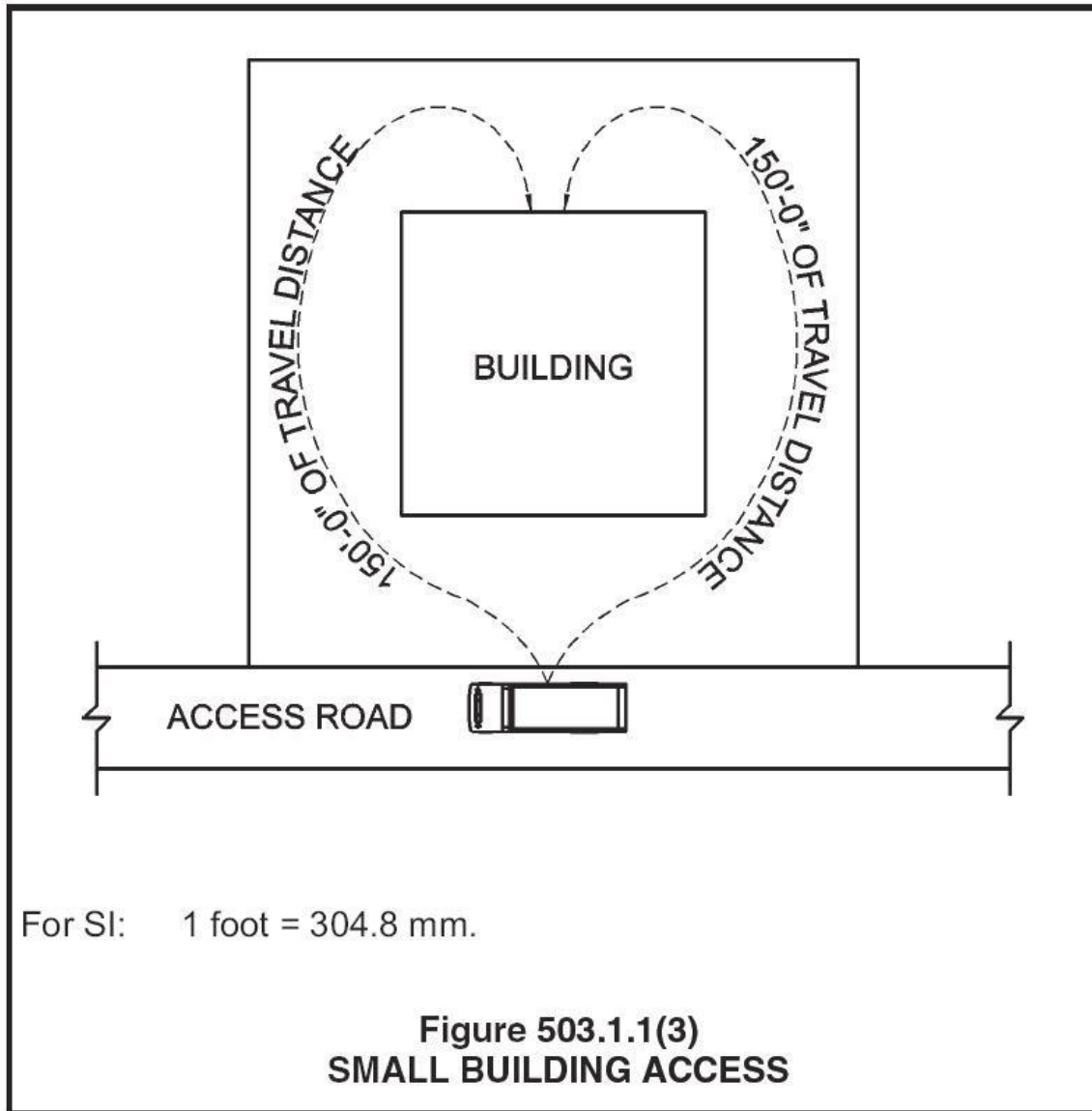


NOT TO SCALE

FIRE LANES

FIRE APPARATUS ACCESS ROADS DIAGRAMS

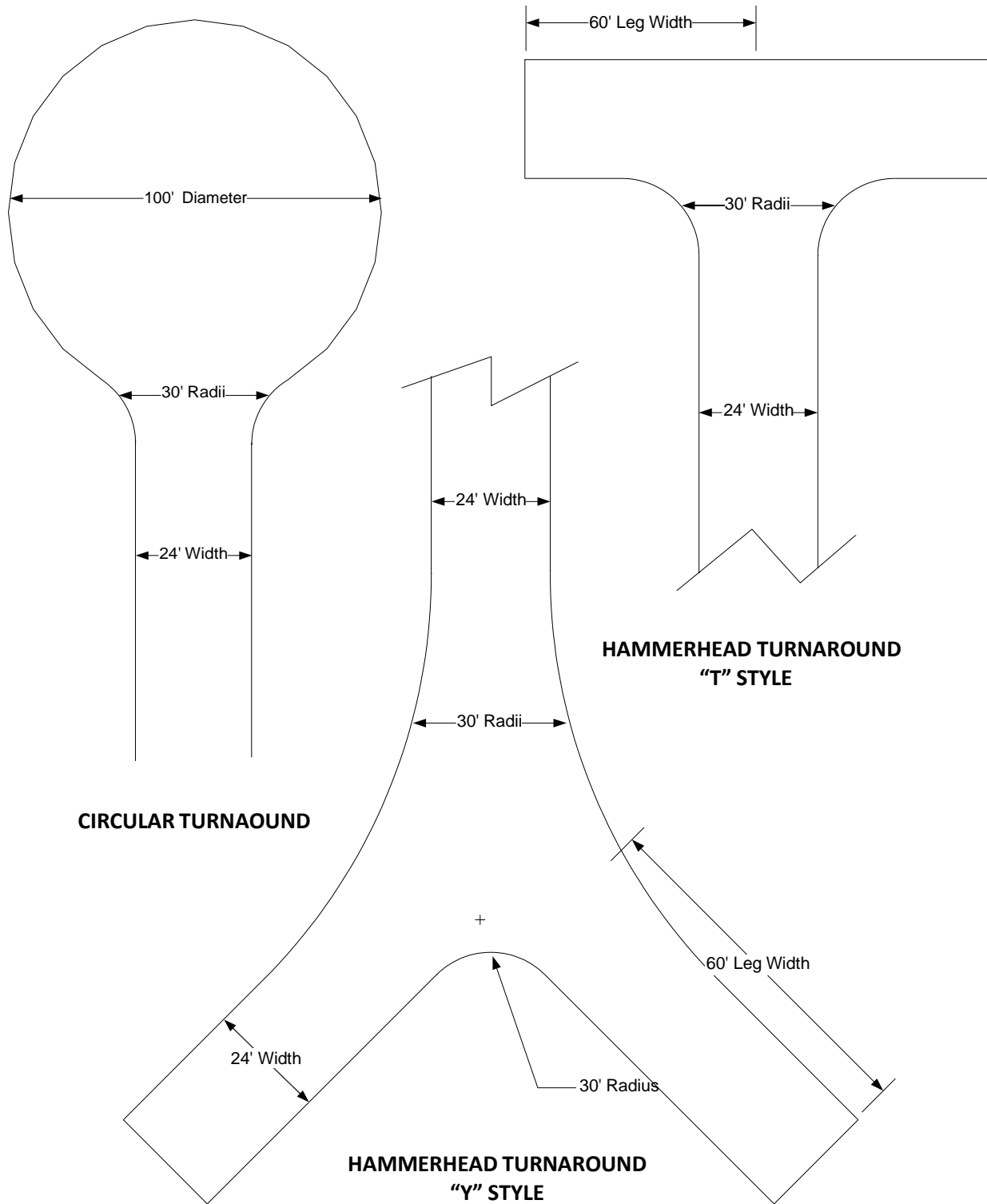
Figure 3, Small Building



NOT TO SCALE

FIRE LANES APPROVED TURNAROUNDS

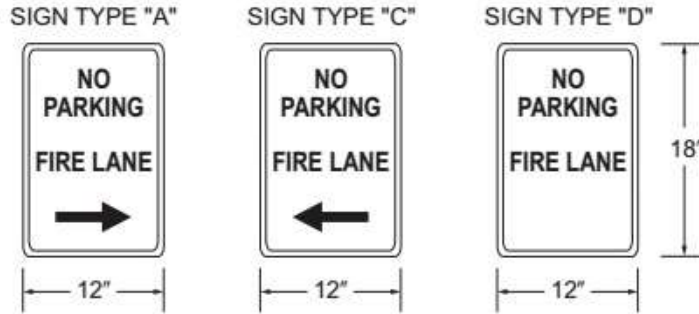
Figure 4



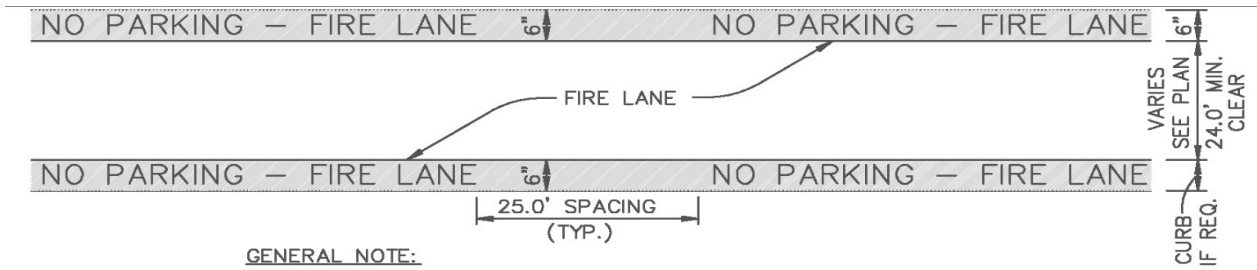
NOT TO SCALE

FIRE LANES SIGNAGE DETAILS

Figure 5



FIRE LANE STRIPING DETAILS



GENERAL NOTE:

- A. STRIPING TO BE DONE IN ACCORDANCE WITH CITY STANDARDS. THE PAVEMENT MARKINGS SHALL BE FROM THE TOP OF THE SEAM OF THE CURB TO A POINT EVEN WITH THE DRIVING SURFACE.

STRIPING DETAIL:

A. PAINT:

- 1. STRIPE SHALL BE SIX (6) INCHES WIDE PAINTED WITH AN EXTERIOR ACRYLIC LATEX PAINT.

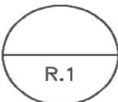
A. COLOR SHALL BE "TRAFFIC RED" GLIDDEN NO. 63251 OR EQUAL.

- 2. LETTERS SHALL BE FOUR (4) INCHES HIGH PAINTED WITH AN EXTERIOR ACRYLIC LATEX PAINT. LETTERS TO BE ONE (1) INCH STROKE.

B. COLOR SHALL BE "TRAFFIC WHITE" GLIDDEN NO. 563245 OR EQUAL.

B. APPLICATION:

- 1. STRIPE MAY BE BRUSHED OR SPRAYED, ONE COAT TO FINISH.
- 2. LETTERS SHALL BE STENCIL FORMED, BRUSH APPLIED AND SPACED AS DETAILED ON THIS SHEET.



FIRE LANE STRIPING

NOT TO SCALE