

Minimum Fire and Zoning Requirements
for
Commercial and Subdivision Site Plans



**COUNTY OF
CAMPBELL**

**FIRE MARSHAL'S OFFICE
ZONING OFFICE**

Standard Notes

The following notes shall be added to all plans, as noted

All Buildings (Landscaping and Fire Systems)

“No landscaping shall be placed within a three-foot radius of any fire hydrant, fire pump test header, fire department connection for fire protection systems, or fire suppression system control valve. Landscaping shall be of a type that will not encroach in the three-foot radius upon reaching maturity.”

Two or More Story Buildings (Hydrants)

“During the construction of any structure or building, permanent fire hydrants shall be installed and in service prior to the use of combustible materials in construction being used on any floor above the first or ground floor level. Fire hydrants shall be maintained accessible to firefighting apparatus at all times (2 or more story buildings).”

Water Flow

Minimum Required Fire Flow

The Statewide Fire Prevention Code (SFPC), Section 508.3, requires the use of an approved method for determining fire flow requirements. Appendix B of the SFPC lists a suggested method and will be used to determine minimum fire flows on all future construction where a connection to CCUSA’s water system is possible. The minimum flow required will never be below 750 gpm unless in rare instances a reduction of fire flow requirements for isolated buildings or buildings in rural areas or small communities where full fire flows are impractical (as authorized in Appendix B, Section B103.1 of the SFPC) is granted upon recommendation of the Fire Marshal, Public Safety Director, Community Development Director, Code Official, and Zoning Administrator. Before such reduction is recommended, the local Fire Chief responsible for the area in question will be notified and asked to comment on the proposed reduction. When a water line is added to CCUSA’s water system, the minimum flow will never drop below 75% of flow required in Appendix B of the SFPC in the length of the line. A flow test will be required for all connections. The Fire Marshal will be notified of the test and be provided a copy of test documentation prior to final approval.

Water Flow Test Data:

Provide water flow test data to support required fire flow. Show the node map and results table for the proposed or existing on site hydrants showing that maximum fire flow can be achieved.

Hydrants

- The submitted plan shall clearly indicate the location of all required or existing fire hydrants.
- Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet. See International Fire Code (IFC) section D103.1 and figure D103.1 “Minimum clearance around a fire hydrant.”
- Parking stalls or other obstructions shall not be placed in front of the access to fire hydrants, fire pump test headers, fire department sprinkler system connections, fire department standpipe connections or fire protection system control valves.
[2006 IFC 508.5.4]

Site Access

Fire Apparatus Access Roads

- Provide details of the method to be used as access to all exterior points of the building from within 150 feet of an approved emergency fire apparatus access roadway. See the 2006 IFC-503.1.1 for code information and exceptions.
- Buildings or facilities having a gross building area of more than 62,000 square feet, or 124,000 square feet with sprinklers, shall be provided with two separate and approved fire apparatus access roads. [2006 IFC D104.2]
- Fire access roads shall be constructed of an all weather surface and the minimum road design weight bearing capacity for emergency fire apparatus travel shall be 75,000 pounds. [2006 IFC D102.1]
- Two separate access roads shall be provided for all Residential Developments where 30 or more homes are to be constructed.

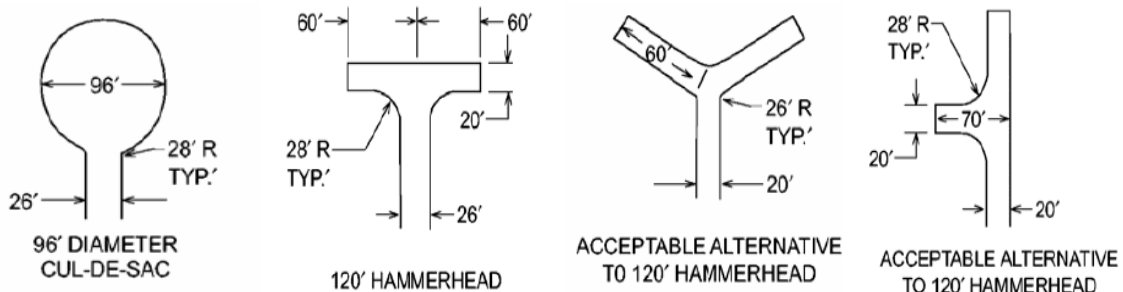
Aerial Access

- Buildings or portions of buildings or facilities exceeding thirty feet in height above the lowest level of fire department vehicle access shall be provided with an aerial fire apparatus access road. The aerial fire apparatus access road shall be a minimum of 26 feet unobstructed clear width in the immediate vicinity of the building. Overhead obstructions, such as utility or power lines, shall not be located within the aerial fire apparatus access roadway. At least one aerial fire apparatus access roadway shall be located a minimum of 15 feet and a maximum of 30 feet from the building and positioned parallel to one entire side of the building. [IFC D105).
- Buildings or facilities exceeding 30 feet or three stories shall have at least three means of fire apparatus access for each structure. [IFC D104.1]

Turning Radius

- The minimum turning radius to be provided for emergency fire apparatus to travel, including cul-de-sacs, shall be at least 48 feet (outside). The turning radius shall be demonstrated on the plan by template. [IFC D103.3]
- Dead end emergency fire apparatus access roadways and fire lanes in excess of 150 feet shall be provided with an approved turn-around. Dimensions of the approved turn-around shall be in accordance with figure D103.1 of the 2006 edition of the international fire code. All dimensions of the turn-round shall be shown on the plan. [IFC D103.4]

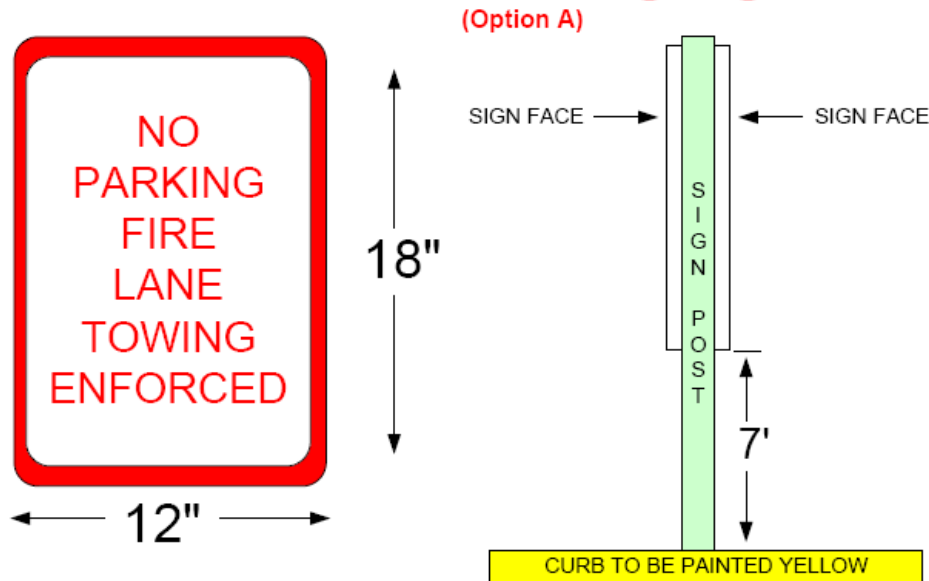
Approved Turn-Arounds



Fire Lane Markings

The approximate location of all required fire lane signs and curb/street marking shall be indicated on the plan. Fire lanes that are between 20 and 26 feet in width shall be posted and marked on *both* sides of the roadway. Fire lanes between 26 and 32 feet in width shall be posted and marked on *one* side of the roadway. The location of and method of marking fire lanes shall be clearly indicated on the submitted site plan. All fire lane signs shall be mounted on both sides of the post and installed perpendicular to the curb. See details on the next two pages. The signs shall contain the following message: "No Parking Fire Lane Towing Enforced"

Fire Lane Parking Signs



SIGN COLORS: RED LETTER AND BORDER ON A REFLECTIVE WHITE BACKGROUND

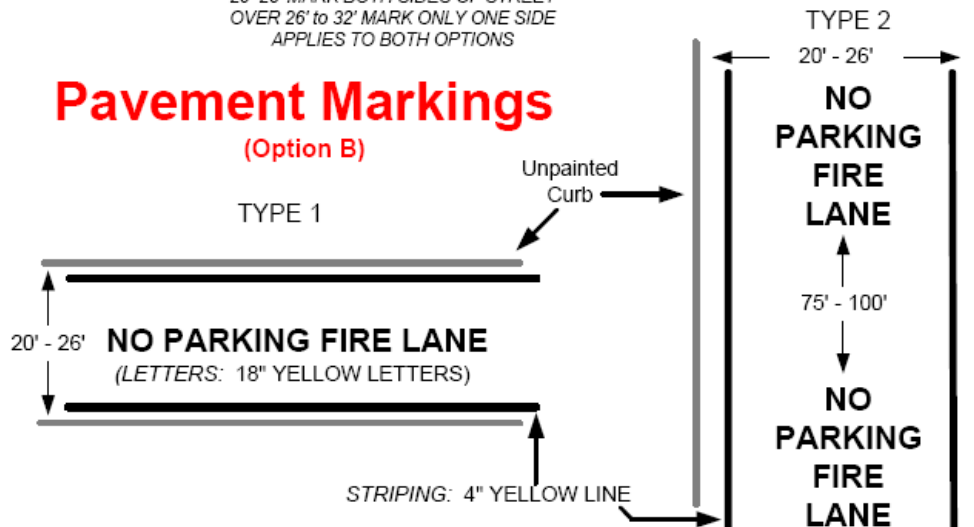
LETTERS: TWO (2) INCH "C" SERIES

NOTE: THIS DRAWING IS FOR GUIDANCE ONLY. REFER TO VA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS FOR SPECIFICATIONS.

20'-26' MARK BOTH SIDES OF STREET
OVER 26' to 32' MARK ONLY ONE SIDE
APPLIES TO BOTH OPTIONS

Pavement Markings

(Option B)



Parking Requirements

What determines the number of required parking spaces?

The Zoning Ordinance determines the minimum number of spaces based on the use of the property. **Please see the chart on the next page.**

Does the parking lot have to be paved?

Paving is required when the total number of required spaces is ten (10) or more. Paving can be accomplished with asphalt, concrete, or surface treatment. Gravel lots are only permitted when the required number of spaces is nine (9) or less.

Does the parking lot have to have individual spaces marked or painted?

Individual spaces have to be adequately designated when there are 3 or more required spaces in the lot. Painting lines is the most efficient way to do that when the lot is paved; designation on gravel lots can be accomplished with concrete blocks or other means as determined by the zoning administrator.

What are the dimensions of a typical parking space?

9 feet by 18 feet is the minimum size for all off street parking except handicapped-accessible spaces.

When is handicapped-accessible parking required?

It is generally required for all uses except at individual single-family residences. The Zoning Ordinance determines the minimum number of accessible spaces based on a formula.

What are the dimensions of a handicapped-accessible parking space?

There are two types of spaces required; a standard space is at least 8 feet by 18 feet with an adjacent access aisle at least 5 feet wide. A van-accessible space is at least 8 feet by 18 feet with an adjacent access aisle at least 8 feet wide. **Please see the diagram on the next page.**

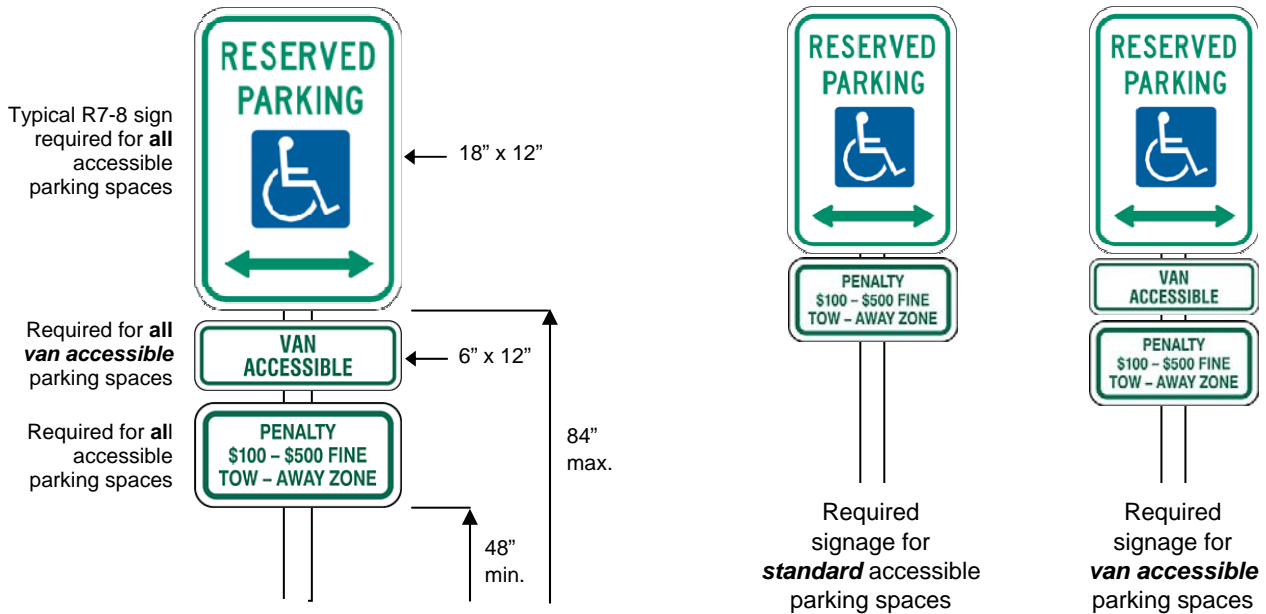
Can a handicapped-accessible space be marked by a painted symbol on the pavement?

No; the spaces must be marked by an above-grade sign. Painted symbols on pavement are not recognized by law as reserving the space for the disabled.

What are the requirements for above-grade signs for accessible parking spaces?

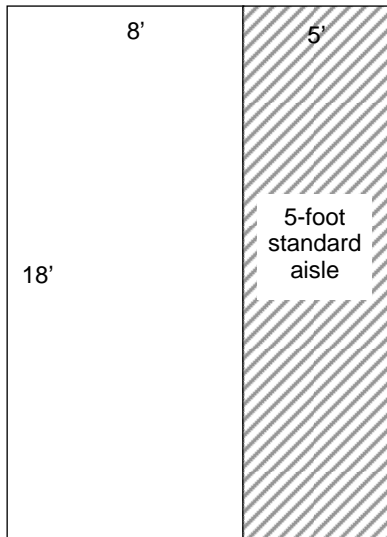
There are specific requirements for the wording and height of the signs. **Please see the diagrams on the next page.**

Sign Requirements for Handicapped-Accessible Spaces

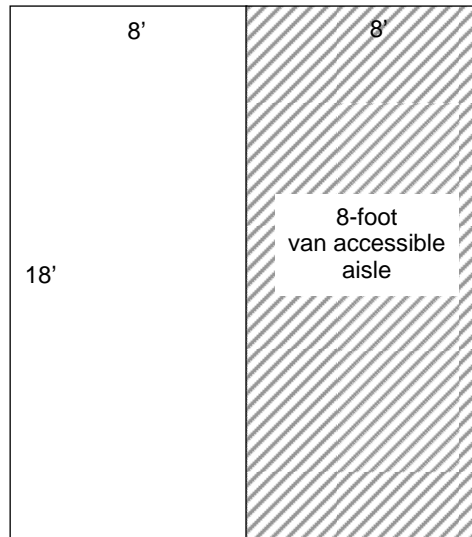


Handicapped-Accessible Parking Spaces

1 out of every 8 accessible spaces must be van accessible.
 If you are only required to provide one space, it must be van accessible.



Standard size handicapped space and aisle



Van accessible handicapped space and aisle

# Parking Spaces	# Handicapped Parking Spaces
1-25	1
26-50	2
51-75	3
76-100	4
101-150	5
151-200	6
201-300	7
301-400	8
401-500	9
501-1000	2% of total
1001+	20 + 1 space for every 100 over 1,000