Midwest City Fire Department
Fire Marshal's Office

Development Review
Site Plans, Plats & Annexations

This guide is intended as a resource for the review of development related plans for commercial sites and residential subdivisions.

Site Plans are reviewed to determine compliance with Fire Department requirements as they relate to site construction, layout, building size, fire lanes, fire department access, fire hydrants, and other issues as determined. These requirements can be found in the 2015 International Fire Code, as adopted and amended by the City of Midwest City and the Midwest City Ordinance's. In an effort to expedite the Fire Marshal's site plan review process, please ensure the following list items are incorporated into the proposed civil construction plans.

General Comments

1. Site Plans and Plats in the civil construction drawing set shall match the Site Plan and Plat approved by the Planning Department and City Council.

Fire Department Access Requirements

2. Fire lane construction shall be in accordance with the International Fire Code Section 503 and Midwest City Ordinance Section 15-15.
3. 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 public street in accordance with IFC Section 503.1.1.
   Note: Public streets may not be considered an approved access for the purposes of the hose lay measurement based on the roadway in question and type. As a general rule, all access shall be on-site.
4. Additional fire lanes may be required based upon the layout of the site and size of the building(s) with regards to Fire Department access, mutual/cross access, and special hazards or as designated by the Fire Marshal.
5. Fire lanes must be shaded, or otherwise, clearly marked on the plans.
6. Fire lanes must meet the criteria set forth in Midwest City Ordinance Section 15-15 and the International Fire Code.
   a. Fire lanes with a width of 20 feet; require a turning radius of 30 feet; or
   b. Fire lanes with a width of 26 feet, require a turning radius of 30 feet; or
   c. Fire lanes with a width of 30 feet, require a turning radius of 20 feet;
   d. Minimum clear vertical height clearance of 14 feet;
   e. Provide an all-weather driving surface;
   f. Support a minimum of 75,000 lbs;
   g. Maximum 6 percent in grade change along the fire lane;
   h. Maximum 5 percent cross slope, angle or departure, and angle of approach;

   i. Maximum 6 percent net grade change for hills and valleys;
   j. Aerial Apparatus Access road shall be provided for buildings or portions of buildings exceeding 30 feet in height above the lowest level of fire department vehicle access and shall be provided with a 26 foot wide fire lane. The fire lane shall be a minimum of 15 feet to a maximum of 30 feet from the building and shall be positioned parallel to one entire side of the building in accordance with the International Fire Code Section D105.
7. Fire lane construction detail drawings, including temporary emergency access easements are required on all plan submittals.
8. Fire Lane Stripping shall be done in accordance with City Standards. Fire lane detail is provided on the Midwest City Fire Department page under the forms link.
9. Emergency access easements shall be approved by the Fire Marshal's office under a separate instrument.
10. Dead end fire lanes in excess of 150 feet shall be provided with an approved turnaround.
11. Size, type and location of turnarounds are required to be approved by the Fire Marshal's office.
12. Gated and controlled access shall be in accordance with Midwest City Ordinance Section 15-26.
13. The required number of fire department access points is required to be approved by the Fire Marshal's office.

Fire Hydrants, Fire Department Connections and Water Lines Requirements

14. Existing and proposed fire hydrants shall be indicated on the plans.
15. Location of water valves.
16. Fire hydrants shall meet or exceed all applicable requirement of ANSI/AWWA C502. Hydrants shall be the dry barrel type having (pumper nozzle and two (2) hose nozzles. Fire hydrants shall be Mueller "Centurion", Kennedy "Guardian", U.S. Pipe and Foundry "Metropolitan", American Cast Iron Pipe "American Darling", Clow "Medallion", or an approved equal. All hydrants provided for fire protection shall receive two (2) coats of red paint.
17. Fire Department thread is NST only.
18. Type and size of underground water lines serving the fire hydrants, and other utility services.
19. Size and location of the underground water line, Fire Service for the fire sprinkler system.
20. Location of backflow prevention.
21. Fire lines shall be looped.
22. Dead end lines shall comply with Midwest City Ordinance Section 15-22.
23. Fire hydrants shall be so spaced such that all portions of the exterior of the building are within the following distances as the hose lays:
    a. 500 feet for areas containing one- and two-family detached dwellings
    b. 400 feet for areas not containing one- and two-family detached dwellings
    c. Spacing may be increased / decreased due to occupancy type, construction type and fire flow.
24. Proposed location of the Remote Fire Department Connection (FDC). *Note: The FDC shall meet the requirements in accordance of Midwest City Fire Department* ***Administrative Ruling 2018-02 Remote FDC Requirements.***
25. The FDC shall be located a minimum of 3 feet from the face to any landscaping and provided a clear pathway to the fire lane and adjacent fire hydrant. Parking, screening and landscaping are considered obstructions.
26. The FDC shall be located, as practical, near the corner of the building on the outside edge of the fire lane.

27. The FDC shall be protected by bollards.
28. The FDC shall be located within 50 feet of a hydrant.
29. Indicate the following notation on the Utility Plan for the Fire Service:

    Fire Sprinkler Underground Water Line Specifications:
    All underground piping shall be a minimum of Class 200 / DR 14 or better. Embedment shall be No. 4 crushed stone. Depth of Bury – minimum is 48 inches from grade to the top of the pipe. All underground lines begin at the point of connection to the circulating public / private water main and terminate at the top of the spigot piece 1 ft. above the finished floor and no more than 5 ft. inside the building.

Vertical Construction

30. Fire hydrants and fire lane access roadways shall be installed, striped and maintained **Prior to Vertical Construction** of any building or structure.

Plat Requirements

31. Plats shall show all fire lane easements and shall match the approved Site Plan.
32. A curve table shall be provided and all fire lane radii shall be referenced.
33. Fire lane width shall be indicated on the plat.
34. If a temporary emergency access easement is provided on the Site Plan, it shall be shown and referenced on the associated Plat.

Residential Subdivision Requirements

35. Fire hydrants and fire lane access roadways shall be installed and maintained **Prior to Vertical Construction** of any building or structure.
36. A minimum of two (2) points of emergency vehicle access shall be provided and approved for any Multi-Family residential development having 100 or more dwelling units or any one- or two-family dwelling residential developments where the number of dwelling units exceeds 30. The two points of access shall be minimum of 140 feet apart, edge to edge. *Note: Additional emergency vehicle access points may be increased depending on the number of dwelling units located in the facility.*
37. When a single emergency vehicle access point is provided, two entry points separated by a monument with a minimum of 14 feet clear width access lanes shall be provided.
38. The maximum cul-de-sac length shall not exceed 600 feet in length as measured from the centerline of the intersection to the center point of the radius.
39. All cul-de-sacs must have a minimum paved radius of 50 feet.
40. Width of streets must allow passage of emergency vehicles with cars parked on both sides of the street. Minimum clear driving width for fire apparatus access is 11 feet.
41. Spacing between fire hydrants shall not exceed 500 feet. The spacing required may be increased or decreased due to the required fire flow requirements of the subdivision and provided fire apparatus access.
42. Fire hydrants shall not be located in the bulb of a cul-de-sac.
43. Distances between hydrants shall be measured along the route the fire hose is laid by fire apparatus vehicles, not as the “crow flies”.

Annexation Requirements

44. Two points of approved fire department all-weather access shall be provided to the proposed property.
45. Functional fire hydrants shall be provided on the proposed property.
46. Water lines shall be provided, or capacity to provide, the required flow on the proposed property in accordance with the IFC.

All criteria for the purposes of this guideline and any other guidelines or requirements of the Fire Department shall conform to the 2015 International Fire Code, as adopted and amended by the City of Midwest City.
This guide does not replace, nor supersede any codes and/or ordinances adopted by the City of Midwest City, or determinations and positions of the Fire Chief or Fire Marshal.