This guide is intended as a resource for the civil construction plan submittal requirements for commercial and multi-family projects. Please refer to the 2021 International Codes as adopted and amended by City of Rockwall for all requirements. In an effort to expedite the Fire Marshal's civil plan review process, please ensure the following list of items are incorporated into the proposed civil construction plans.

General Comments

1) Site plan in the civil construction drawing set shall be the site plan approved by City Council.

Fire Access

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.
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. (Exception: Fire Marshal shall approve layout for multiple-family residential projects.)
4) 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 ten feet (10') wide unobstructed pathway.
   Exceptions: The fire code official is authorized to increase the dimension of 150 feet where:
   (1) The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3.
   (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.
5) Fire lanes shall be clearly indicated width, radii, and construction details.
6) Fire lanes shall have a width of 24-feet and a minimum vertical height clearance of 14-feet.
7) Fire lane shall be concrete with a minimum 6" thickness, 3,600 psi strength in accordance with City of Rockwall Engineering Design Standards.
8) Fire lane cannot exceed 10 % in grade change, 5% cross slope, and angles of approach and departure not to exceed 8%.
9) The required turning radius of a fire apparatus access road shall be in accordance with:
   a) For buildings less than 30-feet and less than 3 stories in height:
      i) 20-feet (inside) for turns less than or equal to 90 degrees
      ii) 25-feet (inside) for turns greater than 90 degrees
   b) For buildings 30-feet or more and/or 3 or more stories in height minimum interior turning radius of 30 feet.

c) For purposes of this section, the building height is measured from the lowest finished grade of the fire access roads to the point of accessible roof level, including parapet walls. For buildings with pitched roofs, the height is measured to the roof plate.

10) Dead end fire lanes in excess of 150-feet shall be provided with an approved turnaround. Size, type and location of turnarounds are required to be approved by the Fire Marshal.
11) Gated access that cross fire lane and/or access to the exterior building walls shall be reviewed and approved by the Fire Marshal. (See *Access Control Gates Guidelines*)
12) See *Fire Lane Guidelines* for additional information.

Fire Hydrants and Water Lines

13) Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the fire code official.
    a) Exceptions:
        i) For Group R-3 and Group U occupancies, the distance requirement shall be 600 feet.
        ii) For buildings equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, the distance requirement shall be 600 feet.
14) An approved water supply capable of supplying the required fire flow for fire protection shall be provided. A water flow test verifying capabilities shall be witnessed by the Fire Marshal Division prior to vertical construction.
15) Fire hydrants utilized to meet the requirements of this section shall be available to fire department personnel with no obstructions, which cannot be crossed by fire fighters pulling hose lines.
16) Proposed new fire hydrants shall be indicated on the plans.
17) Existing fire hydrants to be considered for the use shall be indicated on the plans.
    (Existing fire hydrants on adjacent properties shall not be considered available unless fire apparatus access roads extend between properties and easements are established to prevent obstruction of such roads. Existing fire hydrants on public streets are allowed to be considered as available where streets are not provided with median dividers which cannot be crossed by fire fighters pulling hose lines.)
18) Fire hydrants shall be located 6 foot behind the edge of the pavement. Unless otherwise specifically approved.
19) Fire hydrants shall be at every street intersection, or as otherwise required by the fire code official.
20) Fire hydrants are required to have (2) 2½" connections and (1) 4½" steamer connection. (NST)
21) See *Fire Hydrant Guidelines* for additional information.

Building Size, Height and Location Requirements

22) Building size (square feet) and height to be indicated on the plans.
23) Presence of automatic fire sprinkler system shall be indicated on the plans.

Additional Requirements

24) Fire hydrants and fire lane access roadways shall be installed and maintained PRIOR TO VERTICAL CONTRUCTION of any building or structure, unless otherwise approved by the fire code official.

Fire Protection Systems

25) Size and location of the underground water line servicing the fire sprinkler system shall be indicated on the plans.
26) The proposed location of the Fire Department Connection (FDC) shall be indicated on the plans. The FDC shall be visible and within 50 feet of the fire lane and within 100 feet as the hose lays..
27) A minimum of a 5-foot wide sidewalk or other approved "all-weather" pathway shall be provided from the fire lane to the FDC. Parking/loading spaces are not considered a clear pathway.
28) Location of Backflow prevention device on the fire sprinkler water supply line shall be indicated on the plans.
29) **Plans are not reviewed or approved for fire protection system installation.**
30) A Texas Department of Insurance licensed fire sprinkler contractor must install the fire sprinkler underground piping system from the point the water line leaves the circulating water system and is dedicated to fire protection use to a point 5-foot inside the building and 1-foot above the finish floor. Plans must be submitted to the Rockwall Fire Protection Education and Investigation (FPE&I) Division for review and approval prior to installation.