

	City of Cedar Park Fire Prevention Document		
	<b>Standard Notes – Site Development</b>		
	Number: FP-2	Revision: 3	Effective Date: June 28, 2022

### 0.1 Purpose

- A. This document is intended to provide an applicant for a site development plan with the list of common notes that must be included on the Fire Protection sheet.
- B. Please list all of the following notes on the Fire Protection sheet contained within the site development plan. List in the order and format shown below.

1. Emergency Responder Radio Coverage (ERCC) is a critical component of all site development and building construction and must be contemplated early in the development process. ERCC is required for all new and existing buildings.
  - a. Testing for ERCC is the responsibility of the building owner or representative.
  - b. Testing must be in compliance with 2021 IFC Section 510.
  - c. Testing is required for:
    - i. Buildings with any sub-grade floor, including parking.
    - ii. Any building over 50,000 square feet.
    - iii. Any building more than 3 stories above grade plane.
    - iv. Any multi-story tilt wall building.
    - v. Any building where loss of signal strength becomes evident.
      1. Exception: 1- and 2-family dwellings and townhomes.
  - d. Testing must be completed after the building has the interior walls, exterior walls, elevator shafts, stair shafts, and roof completed, and remediation, if necessary, must be complete prior to issuance of a Certificate of Occupancy.
  - e. Remediation must be in compliance with 2021 IFC Section 510.
    - i. Exception: Plans may state that testing and remediation will be in accordance with 2021 IFC Section 510, however a combination of the two codes will not be allowed. Testing and remediation must both be in accordance with the same standard.
2. Fire Apparatus Access Roads (Fire Lanes)
  - a. Must comply with 2021 International Fire Code (IFC) Chapter 5 and Appendices B through I, L and N, and City of Cedar Park Code of Ordinances Section 5.01 (fire code amendments).
  - b. Must be constructed of asphalt or concrete to support an imposed vehicle load of 90,000 pounds.
    - i. Grass pavers and other alternative materials are not allowed.
  - c. Must provide access to within 150 feet of all portions of the exterior of the building.
    - i. Access allowance is extended to 175 feet for a fully-sprinkled building.
  - d. Must have an unobstructed width of not less than 20 feet, except that at least 26 feet shall be required where hydrants are required along the fire lane or dead-end distances reach 500 feet or greater, or where required by other departments for mobility purposes.
  - e. Must have a minimum inside turning radius of 25 feet, and a minimum outside turning radius of 50 feet.
    - i. The minimum radii must be carried throughout the turning movement, from and to all required fire lanes. Example: a fire lane that turns 180-degrees must have a median depth of at least 50 feet.

- f. Must not have a dead-end of more than 150 feet without an approved turn-around at the dead-end.
  - i. Drawings for approved turn-arounds may be found in the 2021 IFC, Appendix D as amended.
    - 1. Must be 26 feet wide if the dead end is 500 feet or longer.
    - 2. Must have enlarged radii, per illustration.
    - 3. 150-500-foot dead end requires 96-foot diameter cul-de-sac, 120-foot hammerhead, or the alternative to the hammerhead.
    - 4. 501-750-foot dead end requires 96-foot diameter cul-de-sac
    - 5. 751-1000-foot dead end requires 108-foot diameter cul-de-sac
    - 6. Dead-ends over 1000 feet not allowed.
  - g. Shall not exceed a grade of more than 10% along any section of fire lane.
  - h. Shall not exceed an algebraic difference of more than 8% along the angles of approach and departure, measured on a rolling 50-stretch of fire lane. This includes transitions across sidewalks and cross-connecting streets, drives, and fire lanes.
  - i. Must be marked with red traffic paint or dye along both sides of the fire lane in an continuous stripe a minimum of 4 inches wide.
    - i. Stripe must use the curb face where available, and must continue along the pavement where no curb face is present.
    - ii. Must stencil FIRE LANE TOW AWAY ZONE in white letters a minimum of 3 inches high, no further than 35 feet between stencils. Place on curb face where available.
- 3. Fire Lanes During Construction
  - a. All fire lanes shown on the Fire Protection sheet must be in place prior to the onset of vertical construction, and prior to the delivery of any combustible materials to the site.
    - i. Compacted base may be used as fire apparatus access road during construction if approved by the Fire Prevention Division.
      - 1. Permission must be granted in writing.
      - 2. A compaction report shall be submitted by a third-party group prior to vertical construction and at any time throughout the construction process when deemed necessary by the Fire Prevention Division. Report must show 100% of optimal density throughout the fire lane, measured every 50 feet.
      - 3. Failure to maintain compacted base may result in a halt in construction until access is restored according to these standards.
      - 4. Even with compacted base, ALL CONCRETE DRIVEWAY APPROACHES MUST BE INSTALLED.
      - 5. Temporary fire lanes must still be identified as fire lanes – method to be approved by the Fire Prevention Division.
    - b. Fire lanes must be maintained throughout the construction process, and must be kept clear at all time. Blocking the fire lane with construction equipment or materials is not permitted.
  - 4. Fire Protection During Construction
    - a. In addition to the fire lane, all fire hydrants need to be installed, tested, and functional prior to the onset of vertical construction, and prior to the delivery of combustible materials.
    - b. No burning of materials on site allowed.

- c. No smoking allowed inside any building under construction, nor within 10 feet of combustible construction. Site supervisor shall designate smoking areas away from the building under construction.
  - d. Site and building shall be kept free of debris and waste materials.
  - e. Standpipe for fire protection, if required, shall be installed before a building under construction reaches 40 feet in height, and shall be extended per floor up to one floor below the highest progressed floor.
  - f. Buildings shall not be occupied, nor shall any combustible items not related to the construction process be brought into the building prior to acceptance of all required fire protection systems.
  - g. All construction vehicles and those driven by the contractors and their sub-contractors shall be maintained on the lot that is under construction.
  - h. Buildings under construction shall have portable fire extinguishers:
    - i. At each stairway on all floor levels.
    - ii. In every storage and construction shed.
    - iii. Anywhere a special hazard exists, such as flammable liquid storage or use.
5. Fire Hydrants
- a. Fire hydrants shall be installed in accordance with 2021 IFC Chapter 5 and Appendices B and C, including all footnotes in Table C102.1.
  - b. Any hydrant used to serve the fire flow for a building must be within 400 feet of the building, and must be positioned along a fire lane.
  - c. Hydrants shall be installed at least 3 feet from back of curb on the fire lane, but not more than 6 feet.
  - d. Hydrants shall be installed such that the center of the 5” cap measures at least 18 inches from finished grade, but not more than 24 inches.
  - e. Hydrants are required within 100 feet of a fire department connection or standpipe system, measured as the hose would lay along the fire lane. This hydrant shall not substitute for the hydrant(s) required by section 507.5.1.
  - f. The 5” cap must face the fire lane.
6. Approved Fire Apparatus Turn-arounds
- a. Drawings for approved turn-arounds may be found in the 2021 IFC, Appendix D as amended.
    - i. 150-500-foot dead end requires 96-foot diameter cul-de-sac, 120-foot hammerhead, or the alternative to the hammerhead.
    - ii. 501-750-foot dead end requires 96-foot diameter cul-de-sac
    - iii. 751-1000-foot dead end requires 108-foot diameter cul-de-sac
    - iv. Dead-ends over 1000 feet not allowed.