

POLICYNUMBER : I-1035
POLICYTYPE : LANDUSEPLANNING
SUBJECT : EMERGENCYSERVICEPOLICY

Chapters

1. Water Supply
2. Fire Routes
3. Emergency Access
4. Multiple Unit Identifiers /Municipal Addressing
5. Miscellaneous

Definitions (words possessing a defined meaning have been bolded in the body of this document)

Approved – means approved by the Chief Fire Official in consultation with the Chief Building Official .

Building – shall have the same meaning as that provided in the Building Code Act.

Emergency Access – (As covered in Section 3) These driv able access right of ways are intended for use by emergency vehicles in to cul de sacs and other cut off areas. They are typically gated or barred by bollards.

Emergency AccessRoutes – means a right of way provided to a building for the use of emergency service personnel and vehicles, and provided to protect the building and it's occupants .

Fire Route – shall have the same meaning as an Emergency Access Route .

Street Fronting Townhouse – means a townhouse unit where the principal entrance to the unit is located on a city street.

Downloaded from
Parking Sign

1. Water Supply

Except as otherwise stated, these requirements apply to all developments.

Fire Hydrants

- 1.1 Unless otherwise approved, any development served by private access roads, in which the individual buildings are to be constructed in accordance with Part 9 of the OBC, shall be provided with fire hydrants in conformance with the following:
- a) A fire hydrant shall be located within 90m of the principal entrance to each building. Where portions of the building are completely cut off from the remainder of the building, a fire hydrant shall be located within 90m of the principle entrance to each area. The distance from the hydrant to the principle entrance(s) shall be measured using the path that the fire hose would have to be actually laid along, not in a straight line. (Refer to Appendices 1 & 2)
 - b) If additional private fire hydrants are required to meet the requirements of this Subsection the developer shall provide them at their own expense.
 - c) Private fire hydrants shall be constructed and installed in conformance with the City of Kitchener Standard Specifications for Watermains available from Kitchener Utilities. (Appendix 1)
 - d) Private fire hydrants shall be located with the 100mm Stortz connection facing the private access road.
 - e) Private fire hydrants shall be located within 5m of the private access road, no closer than 3m to any building, and kept visible and accessible at all times.
- 1.2 Fire flow from the fire hydrants shall be determined to be sufficient for fire fighting activities in accordance with City of Kitchener Fire Flow Analysis Submission Requirements. A Fire Flow Analysis Report shall be submitted to the City of Kitchener Utilities Engineer for approval. (Appendix 1)
- 1.3 Private fire hydrants shall be tested and maintained annually in conformance with the Fire Code, and at the property owner's expense.

2. Emergency Access Routes

These requirements apply to all developments, except where prescriptive infrastructure requirements exist in the OBC

- 2.1 All developments containing emergency access routes required by the Building Code, the Fire Code, or this policy shall be provided with fire route signs in conformance with Subsections 2.7 through 2.15. Any development, in which Part 9 of the OBC applies, may be required to be provided with emergency access routes in conformance with Subsections 2.2 through 2.6. Such determination shall be made by the City's Chief Fire Official in consultation with the Chief Building Official prior to Site Plan Approval in principle for the proposed development.

Location of Emergency Access Routes

- 2.2 Unless otherwise approved, multiple unit buildings containing townhomes and individual dwelling units, where the principal entrance to the unit or townhome has direct access to the exterior, shall be provided with emergency access routes located so that the principal entrance and every required access opening are located not less than 3 m and not more than 30 m (Appendix 2 Option 1) from the closest portion of the emergency access route, measured along the path of travel, horizontally from the face of the building. Where a developer can show that the 60 m (Appendix 2 Option 2) of provided hose can reach from the fire truck to the most remote room in the dwelling unit, a longer travel distance will be considered.

This limiting factor is based on fire apparatus hose loads intended for use in an initial fire attack in a residential setting. It should be noted that fires in residential homes are the most frequently occurring fire in the City of Kitchener. This restriction takes into account the ability for the Fire Department to effectively intervene in the dwelling unit, using the standard equipment provided on the vehicles. (Appendix 2)

- 2.3 Except as otherwise required in 2.2, emergency access routes shall be provided to a building so that (Appendix 3):
- for a building provided with a fire department pumper connection (siamese), a fire department pumper vehicle can be located adjacent to the hydrants so that the unobstructed distance from a fire department pumper connection to a hydrant is not more than 45 m.
 - for a building not provided with a fire department connection, a fire department pumper vehicle can be located so that the length of the emergency access route from a hydrant to the vehicle plus the

unobstructed path of travel for the fire fighter from the vehicle to the building is not more than 90 m, and

- c) the unobstructed path of travel for the fire fighter from the vehicle to the building is not more than 45 m.
 - d) Emergency access routes shall be located so that the principal entrance and every required access opening are located not less than 3 m and not more than 15 m from the closest portion of the emergency access route .
- 2.4 The unobstructed path of travel for the fire fighter required by Subsection 2.3 from the vehicle to the building shall be measured from the vehicle to the fire department connection provided for the building, except that where no fire department connection is provided, the path of travel shall be measured to the principal entrance of the building.
- 2.5 In all buildings, other than those addressed in 2.2, if a portion of a building is completely cut off from the remainder of the building so that there is no access to the remainder of the building, the emergency access routes required by Subsection 2.3 shall be located so that the unobstructed path of travel from the vehicle to one entrance of each portion of the building is not more than 45 m. (Appendix 4)

Emergency Access Route Design

2.6 Unless otherwise approved , a portion of a roadway or yard provided as a fire route for fire department use shall (Appendix 1).

:

- a) have a clear width not less than 6 m,
- b) have a centerline radius not less than 12 m,
- c) have an overhead clearance not less than 5 m,
- d) have a change of gradient not more than 1 in 12.5 (8%) over a minimum distance of 15 m,
- e) be designed to support the expected loads of fire department vehicles and be surfaced with concrete, asphalt or other material designed to permit accessibility under all climatic conditions,
- f) have turnaround facilities for any dead-end portion of the access route more than 90m long,

- g) be connected with a public thoroughfare , and
- h) will be considered accessible when the following has been provided; the roadway base coat layer, appropriate signage , and hydrants.

Design and Installation Standards for Emergency Access Route Signs

2.7 Sign Plate: Materials shall be approved , corrosion resistant metal; lettering, colour, size shall be in conformance with the following figure:



Red Circle 19.05cm

Black "P" 10.16cm

White Background

Black " Fire Route " 4.45cm

Enforced Wording 1.91cm

Sign: 30 x 45cm

Downloaded from
Parking Sign

2.8 Sign Mounting: mounting methods must be approved . Some methods that will be considered are:

- a) Standard sign post,
- b) Light standard or other equivalent utility pole located not more than 4m from the limit of the fire route , or
- c) Fences, landscape walls and building faces located not more than 4m from the limit of the fire route .

2.9 Mounting Height: Between 2 and 2.5 m measured from the top limit of the sign to the grade of the fire route surface adjacent to the fire route sign.

POLICYNUMBER: I-1035
POLICYTYPE: LANDUSEPLANNING
SUBJECT: EMERGENCYSERVICEPOLICY

- 2.10 Spacing between Signs: not more than 30m spaced such that at least one sign is clearly visible and lettering is legible from all locations within the fire route .
- 2.11 Location of Signs:
- a) Where practical, signs should be located alternating side to side of the fire route.
- b) Where parking is located adjacent to the fire route and is not delineated from the fire route by curbs, signs may be located on the side of the fire route opposite the parking only.
- 2.12 Setback from the Fire Route : Fire route signs shall be at least 0.3m and no more than 4m from the edge of the fire route .
- 2.13 A detailed fire route and signage plan shall be submitted for approval prior to final site plan approval in a legible electronic format, preferably PDF or CAD. Plan detail must include width and centerline turning radii of the fire access route, all fire hydrants or other water supplies, fire department pumper connections relative to the buildings, and the location of all fire route signage. This information may be included on the site plan submission.
- 2.14 The Fire Route signs shall be installed before any occupancy is granted by the Building Department. The City's Chief Fire Official shall inspect the route for compliance when requested to do so by the developer and may order modifications if it does not comply with all requirements.
- 2.15 The property owner is responsible to ensure that the visibility and legibility of the signs are maintained at all times.

Maintenance

- 2.16 All emergency access es, emergency access routes and fire routes located on private and public property shall remain clear from all parked vehicles, obstacles and obstructions and must be maintained in a passable state at all times in accordance with the following:
- a) Snow accumulation shall be removed from all emergency accesses , emergency access routes and fire routes on public property, based on Class 3 classification under the quality standards for winter maintenance activities by the Community Services – Operations Department.