

Little Elm Fire Department Fire Marshal's Office



Automatic Gates

Scope: This policy is design to facilitate Emergency Vehicle access into properties that are equipped with automatic security gates or vehicle access/egress gates installed across required fire lanes.

GENERAL NOTES:

- A **separate** fire permit is required for each automatic gate. (An approved site plan **is not** a permit.)
- Gate motor shall be the type that the drive gear disengages on power failure.
- The City approved Knox key switch (KS2) shall be used for 24 hour Fire Department access. The emergency key switch, when activated, shall by-pass any occupant control and loop systems. When activated, the gate will remain in the open position until de-activated by the Fire Department.
- Only when deactivated will the gate resume normal operation
- The key switch shall open both the entrance and exit gate(s) when gate(s) are in close proximity to each other.
- The Knox key switch shall be mounted 5 ½ feet from grade (location shown on plan).
- The key switch shall be located below a sign labeled "FD ACCESS".
- Per Allen Fire Department Emergency Equipment Sign Requirements
- The minimum clear opening width shall not be less than the width of the required fire lane or access drive. A minimum of twenty-four (24) feet and a minimum unobstructed height of 14 feet shall be maintained.
- Gate operator(s) shall open at a rate of one foot per second. Parking barrier arms will open or clear in approximately two seconds.
- The primary drive gate type that may be installed across fire lanes shall be the sliding type.
- In the event of power failure the gate shall open freely. It shall be capable of being opened manually by one person of average stature.

Primary or Main Gate

- Primary gate is defined as the drive or access point designed as the primary point or one of several primary points of ingress/egress for emergency vehicles.
- The following access systems shall be installed on Primary Gates.
 - "Opticom" receiver switches
 - KS2 Knox Switches
 - Electrical Disconnect
 - Red Emergency Activation strobe

Automatic Secondary Gates (including Main Gates to Storage Facilities)

- Shall mean the drive or access point designed as a secondary or back-up means of ingress/egress for emergency vehicles.
 - KS2 Switches
 - Electrical Disconnect
 - Red Emergency Activation Strobe Light
 - "Exit Only Sign" (*see illustrations below, must meet Fire Department Emergency Equipment Sign Specifications*)

The Fire Marshal may require the "Opticom" system on any automated gates across fire lanes as deemed necessary.

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Opticom Receiver

- Shall be mounted 8 to 10 feet from grade.
- Shall be located behind the access gate (property side).
- Shall be mounted on a 4"x 4" metal post, not on guidepost. And shall be shall be cemented 18" below grade.
- Detectors shall activate 150 ft from gate.
- Each gate shall have two individual detectors or an approved Tomar dual strobe switch, model.
- Detectors shall point toward the **APPROACH** and **EXIT** path of the emergency vehicle.
- Detectors' sight path shall be free of visual obstructions such as signs, covered parking canopies, and vegetation.
- Individual detectors shall be mounted together with the power module in a dual detector mounting box, or with an approved Tomar dual strobeswitch. *Three head detector shall be used for 90 degree turning layouts.*

KS-2 Switch

- Knox key switches shall still be provided as a manual backup.
- The entrance Knox switch shall be located above the residence's keypad, 5 ½ feet from grade.
- The exit Knox switch shall be located on the 4"x 4" preemption post, **recessed** 5 ½ feet from grade, with the detectors.
- Upon activation of the KS-2 switch, the affected gate shall automatically open to a locked open and disabled condition. The system will require manual reset to close the gates after emergency activation.
- A sign identifying "FD ACCESS" shall be mounted above the KS2 Switch. *See Town of Little Elm Fire Department Sign Specification Guide.*

Red Emergency Activation Strobe

All automated gates must also be equipped with one flasher unit and one external lamp assembly with a red globe and guard to be mounted separate from the enclosure. The light shall be visible from both sides of the gate; be mounted at the top of the fence within two (2) feet of the gate opening and flash upon the gate being activated by the Opticom system or KS-2 switch and continue to flash as long as the gate is being held by the emergency access system.

Numbered Keypad.

Public safety access shall be installed at a readily accessible location at each automated drive gate for public safety personnel who may require entry in other emergencies.

The numbers making up the code shall be determined by the Fire Marshal and shall be consistent on all gate systems installed throughout the City. The numbers shall not be changed unless ordered by a written, notarized directive from the Fire Marshal.

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Electrical Disconnect

The gate shall be opened by means of an electrical power disconnect switch in a weather proof box:

- The box shall be red.
- The box shall be mounted on the entry side of the gate within five (5) feet of the gate.
- The box shall be at least five (5) inches high and five (5) inches wide.
- The box shall be clearly labeled "Fire Dept." in white letters one inch tall with one-quarter inch stroke.
- A Knox padlock shall secure the box.
- The box must be clearly visible and accessible.

Electrical Equipment Protection.

All electrical equipment shall be protected from physical damage and weather by approved weather tight boxes or housings.

Performance Test.

Gates and gate systems shall be tested by the Fire Marshal's Office upon completion of the installation of a gate or gate system or when required by the Fire Department. Gates shall not be placed into operation until after acceptance test is approved.

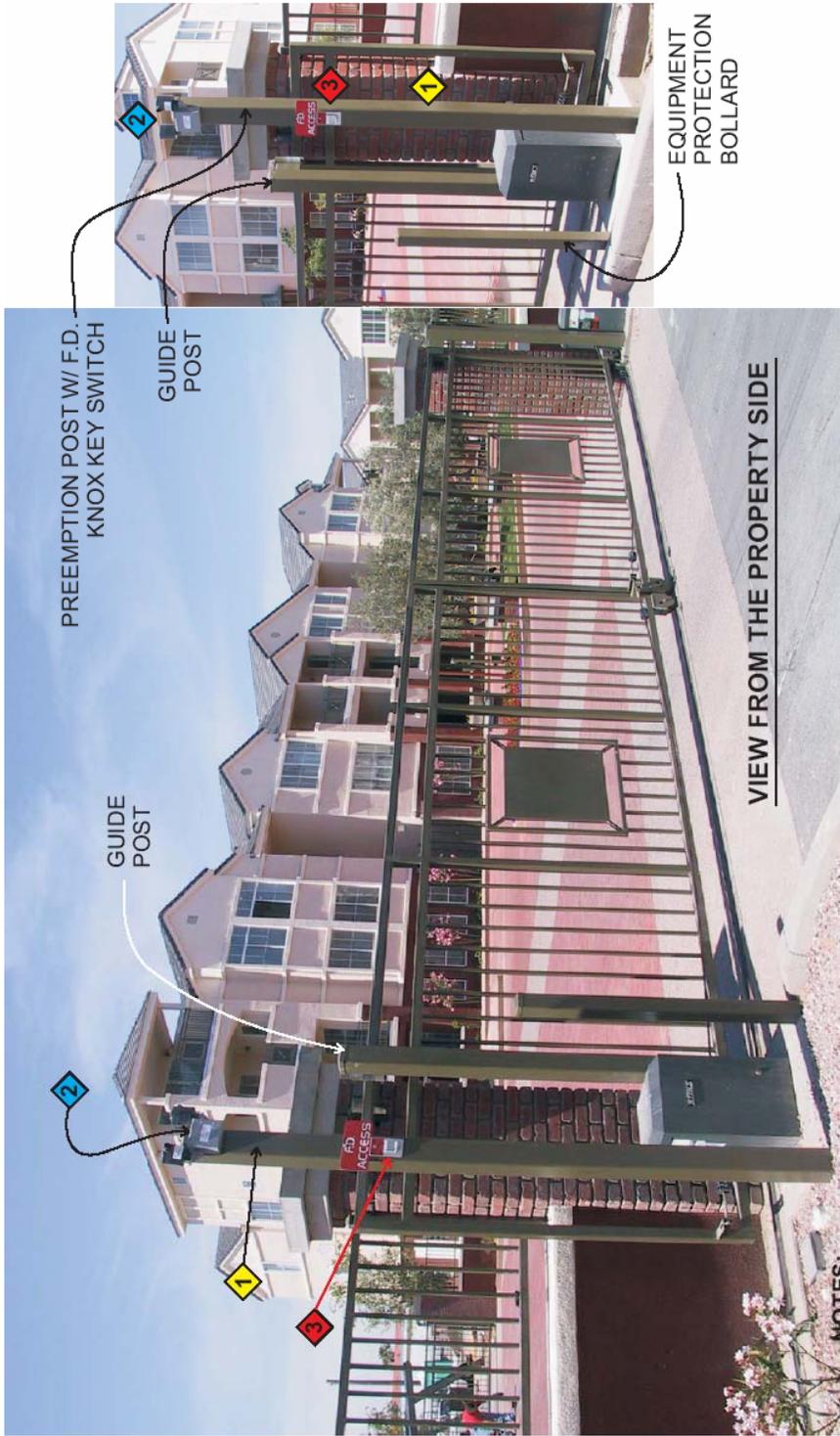


Figure 1 - Property Side of Gate

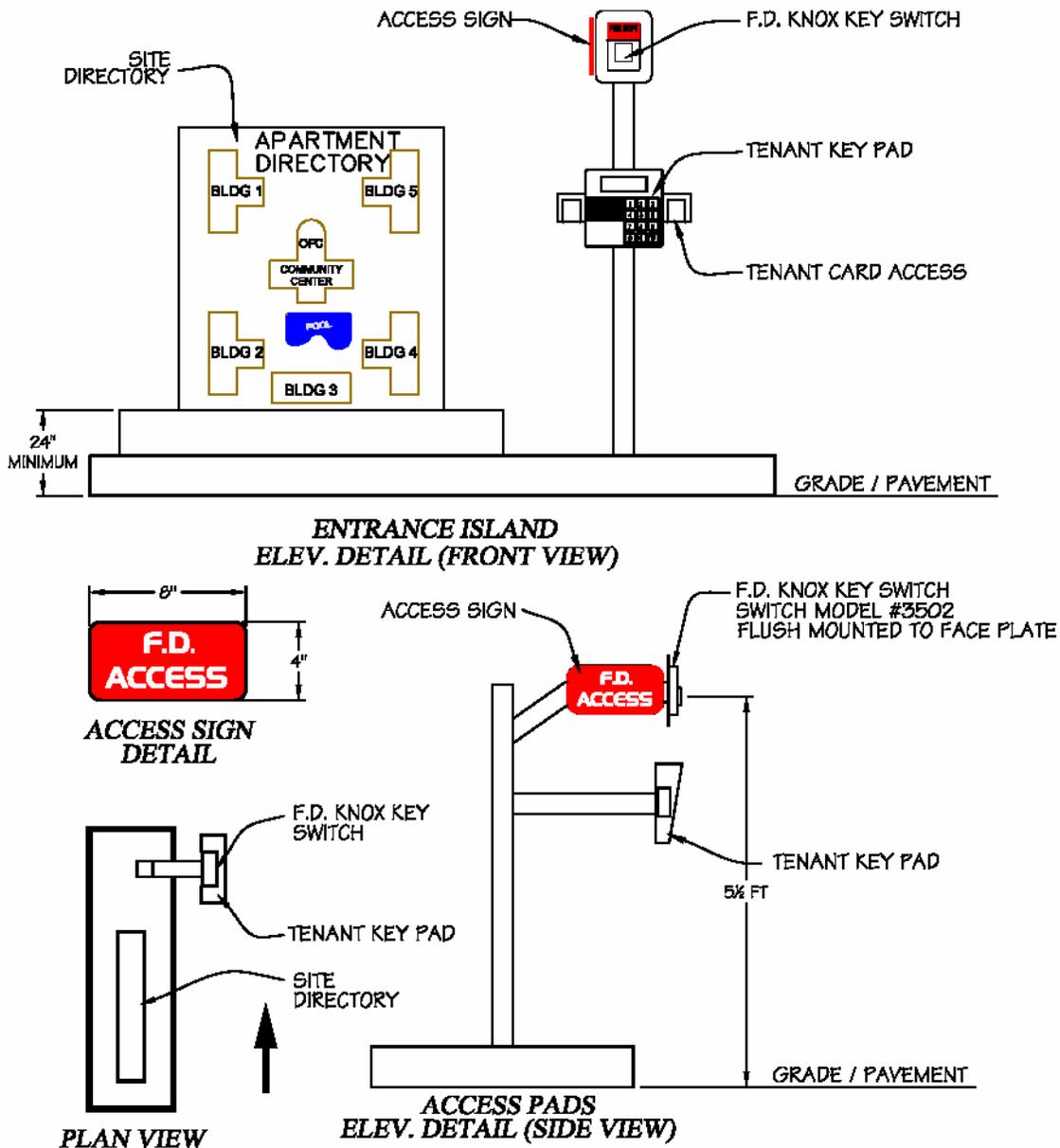


Figure 2 - Entrance

**SPECIAL FIRE DEPARTMENT
ACCESS O.K. SIGN**

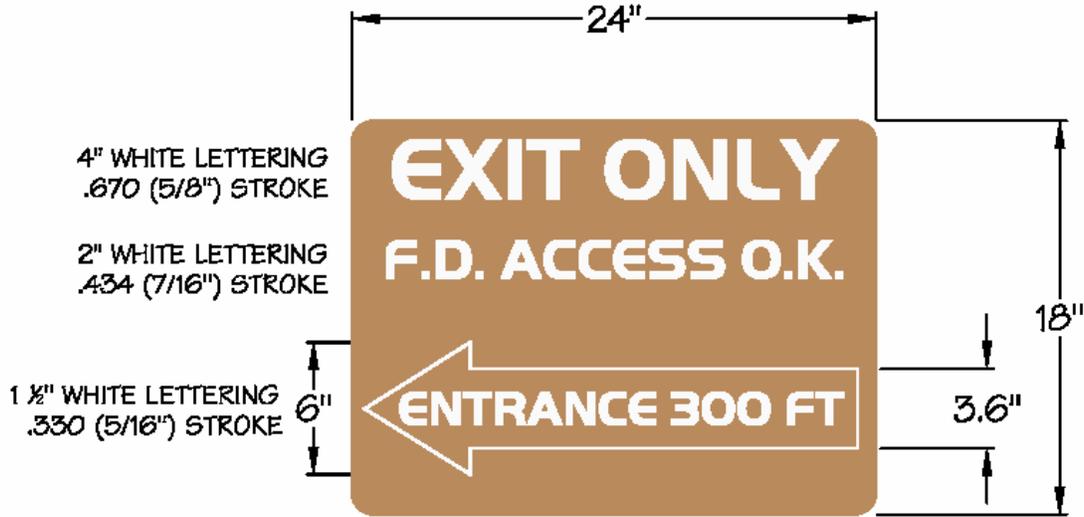


Figure 3 - Exit Only Gates

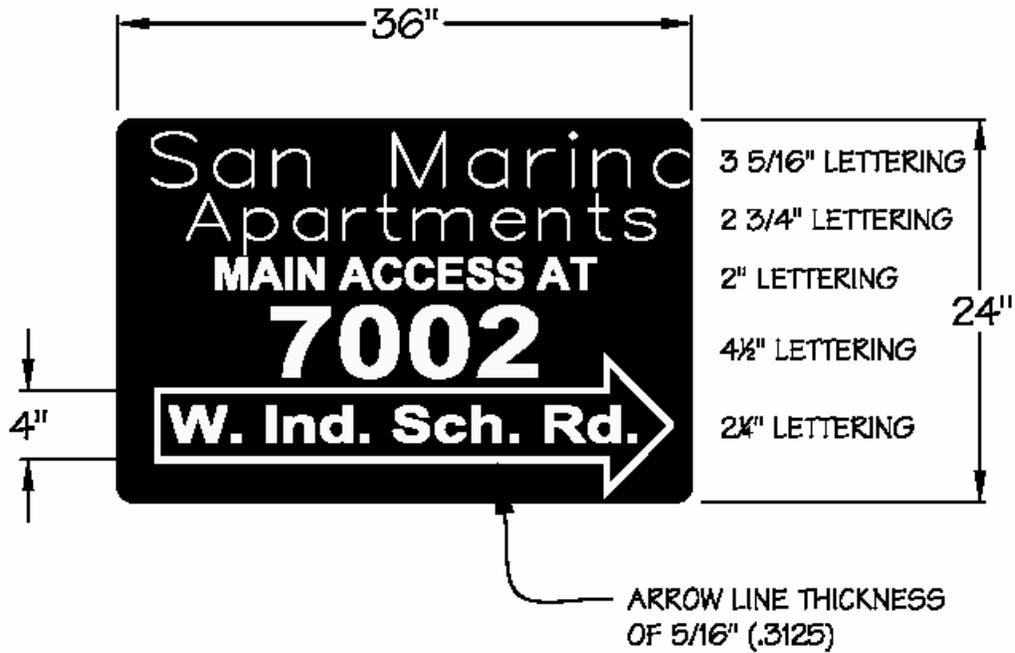


Figure 4 - Exit Gate Sign (main gate on different street or distant location)

NOTE: All signs must meet specifications as outlined in the Town of Little Elm Fire Department Emergency Equipment Sign Guide