



FIRE DEPARTMENT

PLAN REVIEW CONDITIONS

May 17, 2018

ROSEMAN & ASSOCIATES
1526 GRAND BLVD
KANSAS CITY, MO 64108

Permit No: PRCOMCOM20181274
Project Title: KESSLER RIDGE APARTMENTS
Project Address: 451 SW LONGVIEW BLVD, LEES SUMMIT, MO 64081
Parcel Number: 62420290300000000
Location: MINOR PLAT OF FASCINATION AT NEW LONGVIEW LOTS 1 & 2---LOT 2
Type of Work: NEW MULTI-FAMILY
Occupancy Group: RESIDENTIAL, MULTI-FAMILY
Description: NEW APARTMENT BUILDING WITH LOWER LEVEL PARKING

The following is a list of requirements from the City of Lee's Summit that have not been satisfactorily addressed in the plans and specifications. Please contact the appropriate department regarding clarification of comments.

Development Services Department (816) 969-1200

Fire Department (816) 969-1300

Fire Plan Review

Reviewed By: Joe Dir

Rejected

1. Final Development plan

ACTION REQUIRED:

Final development plan must be approved

2. 2012 IFC 1004.3- Posting of occupant load. Every room or space that is an assembly occupancy shall have the occupant load of the room or space posted in a conspicuous place, near the main exit or exit access doorway from the room or space. Posted signs shall be of an approved legible permanent design and shall be maintained by the owner or authorized agent.

ACTION REQUIRED:(verified at inspection)

Post the occupant load in all assembly areas. Pool deck area, patio areas on the 2nd and 3rd floors.

3. 2012 IFC 907.1.1- Construction documents. Construction documents for fire alarm systems shall be submitted for review and approval prior to system installation. Construction documents shall include, but not be limited to, all of the following: 1. A floor plan which indicates the use of all rooms. 2. Locations of alarm-initiating and notification appliances. 3. Alarm control and trouble signaling equipment. 4. Annunciation. 5. Power connection. 6. Battery calculations. 7. Conductor type and sizes. 8. Voltage drop calculations. 9. Manufacturers, model numbers and listing information for equipment, devices and materials. 10. Details of ceiling height and construction. 11. The interface of fire safety control functions. ACTION REQUIRED:(information purposes)

Have the fire alarm system contractor provide engineer stamped shop drawings of the fire alarm system to be installed.

4. 2012 IFC 505.1- Address numbers. New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. In Multi-tenant commercial building where tenants have multiple entrances located on different sides of the building , each door shall be addressed. Address numbers shall be Arabic numerals or alphabet letters. Numbers shall be a minimum of 4 inches (102 mm) high with a minimum stroke width of 0.5 inch (12.7 mm).

ACTION REQUIRED:(verified at inspection)

All accessible sides of the apartment buildings will be required to be addressed at each entrance.

addresses shall be readable from the roadway.

APARTMENT ADDRESSING

ACTION REQUIRED: Address apartments according to plan sheet G101

5. 2012 IFC 506.1- Where required. Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes, the fire code official is authorized to require a key box to be installed in an approved location. The key box shall be of an approved type and shall contain keys to gain necessary access as required by the fire code official. Kox box shall be mounted on the exterior wall above the fire department connection approximately 5'-6' above the finish grade.

506.1.2 Key boxes for nonstandardized fire service elevator

keys. Key boxes provided for nonstandardized fire service elevator keys shall comply with Section 506.1 and all of the following:

1. The key box shall be compatible with an existing rapid entry key box system in use in the jurisdiction and approved by the fire code official.
2. The front cover shall be permanently labeled with the words "Fire Department Use Only—Elevator Keys."
3. The key box shall be mounted at each elevator bank at the lobby nearest to the lowest level of fire department access.
4. The key box shall be mounted 5 feet 6 inches (1676 mm) above the finished floor to the right side of the elevator bank.
5. Contents of the key box are limited to fire service elevator keys. Additional elevator access tools, keys and information pertinent to emergency planning or elevator access shall be permitted when authorized by the fire code official.
6. In buildings with two or more elevator banks, a single key box shall be permitted to be used when such elevator banks are separated by not more than 30 feet (9144 mm). Additional key boxes shall be provided for each individual elevator or elevator bank separated by more than 30 feet (9144 mm).

ACTION REQUIRED:

knox box and elevator key boxes can be obtain onlineat knobox.com

6. 2012 IFC 508.5.1 -Where required. Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 300 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. Exceptions: 1. For Group R-3 and Group U occupancies, the distance requirement shall be 600 feet (183 m).

ACTION REQUIRED:

Additional fire hydrants required for the development.

NUMBER OF FIRE HYDRANTS

C103.1 Fire hydrants available. The minimum number of fire hydrants available to a building shall not be less than that listed in Table C105.1. The number of fire hydrants available to a complex or subdivision shall not be less than that determined by spacing requirements listed in Table C105.1 when applied to fire apparatus access roads and perimeter public streets from which fire operations could be conducted.

7. 2012 IFC 901.2- Construction documents. The fire code official shall have the authority to require construction documents and calculations for all fire protection systems and to require permits be issued for the installation, rehabilitation or modification of any fire protection system. Construction documents for fire protection systems shall be submitted for review and approval prior to system installation.

ACTION REQUIRED:(information purposes)

Have the fire sprinkler system contractor provide engineered stamped shop drawings of the fire sprinkler system to be installed.

STANDPIPE CONNECTIONS

ACTION REQUIRED:(information purposes)

Class 1 standpipe system will be required with 2 1/2" hose valves in all stairways on each floor level at each landing.

FIRE DEPARTMENT CONNECTION

ACTION REQUIRED:

Relocate the fire department connection to the front of the building by the fire sprinkler room within 100' of a fire hydrant. The connection shall be a 4" storz fitting.

8. 2012 IFC 901.5- Installation acceptance testing. Fire detection and alarm systems, fire-extinguishing systems, fire hydrant systems, fire standpipe systems, fire pump systems, private fire service mains and all other fire protection systems and appurtenances thereto shall be subject to acceptance tests as contained in the installation standards and as approved by the fire code official. The fire code official shall be notified before any required acceptance testing. The fire code official shall be notified 48 hours before any required acceptance test.

ACTION REQUIRED:(information purposes)

field tests and acceptance testing of the fire sprinkler, fire alarm and kitchen hood systems prior to the final occupancy inspection. contact the fire department to schedule testing.(816)969-1300

9. Turning radius

ACTION REQUIRED:

reasses access based on the turning radius of a 47" aerial apparatus with a 22" wheel base.

10. Fire Lanes

ACTION REQUIRED:

No parking signs posted on both sides of access roadways.

D103.6.1 Roads 20 to 26 feet in width. Fire lane signs as specified in Section D103.6 shall be posted on both sides of fire apparatus access roads that are 20 to 26 feet wide (6096 to 7925 mm).

D103.6 Signs. Where required by the fire code official, fire apparatus access roads shall be marked with permanent NO PARKING—FIRE LANE signs complying with Figure D103.6. Signs shall have a minimum dimension of 12 inches (305 mm) wide by 18 inches (457 mm) high and have red letters on a white reflective background. Signs shall be posted on one or both sides of the fire apparatus road as required by Section D103.6.1 or D103.6.2.

11. Water Supply

ACTION REQUIRED:

as requested by the development plan, a water supply study is needed to determine the needed water flow for the development.

12. Floor designation

ACTION REQUIRED:(verified at inspection)

[B] 1022.9 Stairway identification signs. A sign shall be provided at each floor landing in an interior exit stairway and ramp connecting more than three stories designating the floor level, the terminus of the top and bottom of the interior exit stairway and ramp and the identification of the stair or ramp. The signage shall also state the story of, and the direction to, the exit discharge and the availability of roof access from the interior exit stairway and ramp for the fire department. The sign shall be located 5 feet (1524 mm) above the floor landing in a position that is readily visible when the doors are in the open and closed positions. In addition to the stairway identification sign, a floor-level sign in raised characters and Braille complying with ICC A117.1 shall be located at each floor-level landing adjacent to the door leading from the interior exit stairway and ramp into the corridor to identify the floor level.

[B] 1022.8 Discharge identification. An interior exit stairway and ramp shall not continue below its level of exit discharge unless an approved barrier is provided at the level of exit discharge to prevent persons from unintentionally continuing into levels below. Directional exit signs shall be provided as specified in Section 1011.

13. Stairway doors

ACTION REQUIRED:

[B] 1008.1.9.11 Stairway doors. Interior stairway means of egress doors shall be openable from both sides without the use of a key or special knowledge or effort.

14. Controlled access egress

ACTION REQUIRED: No keyed locks on a egress side of an exit

[B] 1008.1.9.8 Access-controlled egress doors. The entrance doors in a means of egress in buildings with an occupancy in Groups A, B, E, I-2, M, R-1 or R-2, and entrance doors to tenant spaces in occupancies in Groups A, B, E, I-2, M, R-1 or R-2, are permitted to be equipped with an approved entrance and egress access

control system, listed in accordance with UL 294, which shall be installed in accordance with all of the following criteria:

1. A sensor shall be provided on the egress side arranged to detect an occupant approaching the doors. The doors shall be arranged to unlock by a signal from or loss of power to the sensor.
2. Loss of power to that part of the access control system which locks the doors shall automatically unlock the doors.
3. The doors shall be arranged to unlock from a manual unlocking device located 40 inches to 48 inches (1016 mm to 1219 mm) vertically above the floor and within 5 feet (1524 mm) of the secured doors. Ready access shall be provided to the manual unlocking device and the device shall be clearly identified by a sign that reads "PUSH TO EXIT." When operated, the manual unlocking device shall result in direct interruption of power to the lock—independent of the access control system electronics—and the doors shall remain unlocked for a minimum of 30 seconds.
4. Activation of the building fire alarm system, if provided, shall automatically unlock the doors, and the doors shall remain unlocked until the fire alarm system has been reset.
5. Activation of the building automatic sprinkler or fire detection system, if provided, shall automatically unlock the doors. The doors shall remain unlocked until the fire alarm system has been reset.
6. Entrance doors in buildings with an occupancy in Group A, B, E or M shall not be secured from the egress side during periods that the building is open to the general public.

15. Exit signage

ACTION REQUIRED:

provide additional exit signage in the lower level garage areas, and lower level south stairway

16. duct detection

ACTION REQUIRED:

provide duct detection as needed

[M] 907.2.13.1.2 Duct smoke detection. Duct smoke detectors complying with Section 907.3.1 shall be located as follows:

1. In the main return air and exhaust air plenum of each air-conditioning system having a capacity greater than 2,000 cubic feet per minute (cfm) (0.94 m³/s). Such detectors shall be located in a serviceable area downstream of the last duct inlet.
2. At each connection to a vertical duct or riser

serving two or more stories from a return air duct or plenum of an air-conditioning system. In Group R-1 and R-2 occupancies, a smoke detector is allowed to be used in each return air riser carrying not more than 5,000 cfm (2.4 m³/s) and serving not more than 10 air-inlet openings.

Duct Detection to be monitored

ACTION REQUIRED:

907.3.1 Duct smoke detectors. Smoke detectors installed in ducts shall be listed for the air velocity, temperature and humidity present in the duct. Duct smoke detectors shall be connected to the building's fire alarm control unit when a fire alarm system is required by Section 907.2. Activation of a duct smoke detector shall initiate a visible and audible supervisory signal at a constantly attended location and shall perform the intended fire safety function in accordance with this code and the International Mechanical Code. Duct smoke detectors shall not be used as a substitute for required open area detection.

Exceptions:

1. The supervisory signal at a constantly attended location is not required where duct smoke detectors activate the building's alarm notification appliances.
2. In occupancies not required to be equipped with a fire alarm system, actuation of a smoke detector shall activate a visible and an audible signal in an approved location. Smoke detector trouble conditions shall activate a visible or audible signal in an approved location and shall be identified as air duct detector trouble.

17. Carbon Monoxide Detection

ACTION REQUIRED:

Carbon monoxide detection to be installed according to NFPA 720

18. 2012 IFC 609.2- Where required. A Type I hood shall be installed at or above all commercial cooking appliances and domestic cooking appliances used for commercial purposes that produce grease vapors.

ACTION REQUIRED:

Provide manufacturers specs on the Type 1 kitchen hood system, suppression system, and exhaust duct system

19. 2012 IFC 904.11.5- Portable fire extinguishers for commercial cooking equipment. Portable fire extinguishers shall be provided within a 30-foot (9144 mm) travel distance of commercial-type cooking equipment. Cooking equipment involving vegetable or animal oils and fats shall be protected by a Class K rated portable extinguisher.

ACTION REQUIRED:

Provide a k-class extinguisher to be installed in the kitchen area with the type-1 hood system.

20. 2012 IFC 906.2- General requirements. Portable fire extinguishers shall be selected, installed and maintained in accordance with this section and NFPA 10.

ACTION REQUIRED:

Provide fire extinguishers in the corridors according to the plans and as specified below.

PORTABLE FIRE EXTINGUISHERS

906.1 Where required. Portable fire extinguishers shall be installed in the following locations.

1. In new and existing Group A, B, E, F, H, I, M, R-1, R-2, R-4 and S occupancies.

Exception: In Group R-2 occupancies, portable fire extinguishers shall be required only in locations specified in Items 2 through 6 where each dwelling unit is provided with a portable fire extinguisher having a minimum rating of 1-A:10-B:C.

2. Within 30 feet (9144 mm) of commercial cooking equipment.

3. In areas where flammable or combustible liquids are stored, used or dispensed.

4. On each floor of structures under construction, except Group R-3 occupancies, in accordance with Section 3315.1.

5. Where required by the sections indicated in Table 906.1.

6. Special-hazard areas, including but not limited to laboratories, computer rooms and generator rooms, where required by the fire code official.

The approval of plans and specifications does not permit the violation of any section of the Building Codes or other City Ordinances or State Law.

The review conducted by the City of Lee's Summit Development Services Department shall not be construed as a structural review of the project.