

# FIRE DEPARTMENT

# PLAN REVIEW CONDITIONS

April 28, 2017

NSPJ ARCHITECTS 3515 W 75TH ST, SUITE 201 PRAIRIE VILLAGE, KS 66208

Permit No:PRCOM20170397Project Title:RESIDENCES AT ECHELON - BUILDING #1Project Address:Parcel Number:Location:VariableType of Work:NEW MULTI-FAMILYOccupancy Group:RESIDENTIAL, MULTI-FAMILYDescription:NEW 3 STORY APARTMENT BUILDING

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.

Codes Administration (816) 969-1200

Fire Department (816) 969-1300

Fire Plan Review

**Reviewed By: Joe Dir** 

Rejected

1. ACTION REQUIRED:

REVISE HYDRANT LOCATIONS FOR BUILDINGS 1,2,6,8

903.3.7 Fire department connections.

The location of fire department connections shall be approved by the fire code official. Connections shall be a 4 inch Stroz type fitting and located within 100 feet of a fire hydrant. or as approved by the code official.

2. 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.
 (BLDS 1-8)

ACTION REQUIRED: (information purposes) HAVE FIRE ALARM SYSTEM CONTRACTOR PROVIDE SHOP DRAWINGS FOR THE FIRE ALARM SYSTEM TO BE INSTALLED. 3. 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).

(BLDGS 1-8)

ACTION REQUIRED: (verified at inspection)

POST THE NUMERIC ADDRESS ON ALL FOUR SIDES OF THE BUILDING IN A CONTRASTING COLOR TO THE BACKGROUND. ADDRESSES SHALL BE READABLE FROM THE ROADWAY.

4. 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. ACTION REQUIRED: (information purposes)

(BLDGS 1-8)

PLANS MENTIONED A SUPRA LOCK BOX, NO INFORMATION PROVIDED ABOUT THIS TYPE OF BOX. AUTHORITY HAVING JURISDICTION REQUIRES A KNOX BOX TO BE INSTALLED. A KNOX BOX CAN BE OBTAINED ON LINE AT knoxbox.com THE KNOX BOX IS TO BE MOUNTED ON THE EXTERIOR OF THE BUILDING APPROXIMATELY 5-6 FEET ABOVE THE FIRE DEPARTMENT CONNECTION.

5. 2006 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)

(BLDGS 1-8)

HAVE THE FIRE SPRINKLER SYSTEM CONTRACTOR PROVIDE SHOP DRAWINGS FOR THE FIRE SPRINKLER SYSTEM TO BE INSTALLED.

6. 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 AND ACCEPTANCE TESTING FOR THE FIRE SPRINKLER AND FIRE ALARM SYSTEMS WILL BE REQUIRED PRIOR TO THE FINAL OCCUPANCY INSPECTION. TO SCHEDULE A TEST CONTACT THE FIRE DEPARTMENT AT 816-969-1300.

7. ACTION REQUIRED:

(BLDGS 1-8)

PROVIDE A DOOR HARDWARE SCHEDULE WITH THE FOLLOWING INFORMATION: (1) ARE THE BUILDING ACCESS DOORS GOING TO BE SECURED

[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.

# (2) NO KEYED LOCKS ON A MARKED EXIT

[B] 1008.1.10 Panic and fire exit hardware.

Doors serving a Group H occupancy and doors serving rooms or spaces with an occupant load of 50 or more in a Group A or E occupancy shall not be provided with a latch or lock unless it is panic hardware or fire exit hardware.

Exception: A main exit of a Group A occupancy in compliance with Section 1008.1.9.3, Item 2.

Electrical rooms with equipment rated 1,200 amperes or more and over 6 feet (1829 mm) wide that contain overcurrent devices, switching devices or control devices with exit or exit access doors shall be equipped with panic hardware or fire exit hardware. The doors shall swing in the direction of egress travel.

## [B] 1008.1.10.1 Installation.

Where panic or fire exit hardware is installed, it shall comply with the following:

- 1. Panic hardware shall be listed in accordance with UL 305;
- 2. Fire exit hardware shall be listed in accordance with UL 10C and UL 305;
- 3. The actuating portion of the releasing device shall extend at least one-half of the door leaf width; and
- 4. The maximum unlatching force shall not exceed 15 pounds (67 N).

#### STAIRWAY DOORS:

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.

Exceptions:

1. Stairway discharge doors shall be openable from the egress side and shall only be locked from the opposite side.

2. This section shall not apply to doors arranged in accordance with Section 403.5.3 of the International Building Code.

3. In stairways serving not more than four stories, doors are permitted to be locked from the side opposite the egress side, provided they are openable from the egress side and capable of being unlocked simultaneously without unlatching upon a signal from the fire command center, if present, or a signal by emergency personnel from a single location inside the main entrance to the building.

4. Stairway exit doors shall be openable from the egress side and shall only be locked from the opposite side in Group B, F, M and S occupancies where the only interior access to the tenant space is from a single exit stair where permitted in Section 1021.2.

5. Stairway exit doors shall be openable from the egress side and shall only be locked from the opposite side in Group R-2 occupancies where the only interior access to the dwelling unit is from a single exit stair where permitted in Section 1021.2.

8. 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:(verified at inspection) (BLDGS 1-8)
PROVIDE 2A-10BC FIRE EXTINGUISHERS FOR EACH APARTMENT AND THE CORRIDORS ON ALL FLOORS

(VERIFIED AT INSPECTION)

9. 2012 IFC 906.5- Conspicuous location. Portable fire extinguishers shall be located in conspicuous locations where they will be readily accessible and immediately available for use. These locations shall be along normal paths of travel, unless the fire code official determines that the hazard posed indicates the need for placement away from normal paths of travel.
ACTION REQUIRED: (verified at inspection) (BLDGS 1-8)
MOUNT THE FIRE EXTINGUISHER IN THE APARTMENTS IN A EASILY ACCESSABLE LOCATION.
MOUNT THE FIRE EXTINGUISHERS IN THE CORRIDORS AT EACH STAIRWAY ACCESS DOOR ON ALL FLOORS. (VERIFIED AT INSPECTION)

#### Building Plan Review Reviewed By: Joe Frogge Rejected

1. The building permit for this project can not be issued until the Codes Administration Department has received the approved Final Development Plan from the Planning and Development Department.

Action required: Comment is for informational purposes. 4/25/17 - acknowledged in letter

2. A License Tax application completed by the contractor must be submitted to the City of Lee's Summit, Codes Administration Department, and any applicable License Tax paid prior to issuing a building permit.

Action required: Comment is for informational purposes. 4/25/17 - acknowledged in letter

3. The project cost, which is used to establish the permit fee, has not been provided.

Action required: Comment is for informational purposes. Provide separate cost each structure. 4/25/17 - Acknowledged

4. Copies of the engineered truss package were not provided at the time of permit application.

Action required: Provide floor and roof truss packages or request deferral. (Applies to all apartment buildings, garages, and carports) 4/25/17 - deferred per request

6. 2012 IBC 1704.2 Special inspections. Where application is made for construction as described in this section, the owner or the registered design professional in responsible charge acting as the owner's agent shall employ one or more approved agencies to perform inspections during construction on the types of work listed under Section 1705. These inspections are in addition to the inspections identified in Lee's Summit Code of Ordinances Chapter 7. (see code section for exceptions)

Action required: Provide statement of special inspections / letter of responsibility from company contracted to perform special inspections. (this applies to all structures greater than 10,000 s.f.) 4/25/17 - acknowledged in letter

7. For clarity, the plan reviews for all apartment buildings, garages, and carports have been reported upon under this permit number only.

Action required. Comment is for informational purposes only. 4/25/17 - acknowledged in letter

### 16. Water Heaters

2012 IPC 502.1 General. Water heaters shall be installed in accordance with the manufacturer's installation instructions. Oil-fired water heaters shall conform to the requirements of this code and the International Mechanical Code. Electric water heaters shall conform to the requirements of this code and provisions of NFPA 70. Gas-fired water heaters shall conform to the requirements of the International Fuel Gas Code.

Action required: Modify drawings to specify expansion tanks at water heaters or provide documentation to verify that manufacturer does not require the tanks.

4/25/17 - Relief valve cited likely will not satisfy the water heater manufacturer's instructions. Provide expansion tanks at water heaters or provide verification from water heater manufacturer that they are not required.

17. 2012 IBC 1003.3.3 - Horizontal projections. Structural elements, fixtures or furnishings shall not project horizontally from either side more than 4 inches over any walking surface between the heights of 27 inches and 80 inches above the walking surface.

Action required: Unit heaters installed at stair landings are limited to 4" deep. Field verify. 4/25/17 - acknowledged in letter - Field verify.

19. 2012 IBC Exit Signs 1011.1 Where Required. Exits and exit access doors shall be marked by an approved exit sign readily visible from any direction of egress travel. The path of egress travel to exits and within exits shall be marked by readily visible exit signs to clearly indicate the direction of egress travel in cases where the exit of the path of egress travel is not immediately visible to the occupants. Intervening means of egress doors within exits shall be marked by exit signs. Exit sign placement shall be such that no point in an exit access corridor or exit passageway is more than 100 feet or the listed viewing distance for the sign, whichever is less, from the nearest visible exit sign. (see code section for exceptions)

Action required: Provide exit signs at the ends of each storage room/garage corridor at the apartment lower levels.

4/25/17 - Apartment lighting plans not found in resubmittal.

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 Codes Administration Department shall not be construed as a structural review of the project.