

# FIRE DEPARTMENT

### **PLAN REVIEW CONDITIONS**

June 14, 2017

SBC ARCHITECTURE 3009 ELMIRA CT INDEPENDENCE, MO 64057

Permit No: PRCOM20171522 Project Title: FCI FEDERAL

Project Address: 2640 NE MCBAINE DR, LEES SUMMIT, MO 64064

Parcel Number: 52240070300000000

Location: I-470 BUSINESS AND TECHNOLOGY CENTER LOT 12A

Type of Work: NEW TENANT FINISH

Occupancy Group:

Description: TENANT FINISH FOR DOCUMENT STORAGE FACILITY

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 Approved with Conditions

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. ACTION REQUIRED:(information purposes)

Have the fire alarm system contractor provide shop drawings of the fire alarm system modifications to be done

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).

ACTION REQUIRED:(verified at inspection)
Addressing shall be readable from the roadway

- 4. 2006 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.
- 5. 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 shop drawings of the fire sprinkler system modifications 3206.1 General.

Fire protection and life safety features for high-piled storage areas shall be in accordance with Sections 3206.2 through 3206.10.

3206.7 Smoke and heat removal.

Where smoke and heat removal are required by Table 3206.2, smoke and heat vents shall be provided in accordance with Section 910. Where draft curtains are required by Table 3206.2, they shall be provided in accordance with Section 910.3.5.

or installation of a ESFR suppression system see chart 3206.2 sud-note i

Stand pipe system

3206.8 Fire department hose connections.

Where exit passageways are required by the International Building Code for egress, a Class I standpipe system shall be provided in accordance with Section 905.

**ACTION REQUIRED:** 

the existing standpipe connections will have to be relocated to the two west side man doors.

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 test and acceptance testing of the fire sprinkler and alarm systems will be required prior to the final occupancy inspection. To schedule a test contact the fire department at 816-969-1300.

7. 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)

Provide one 2A-10BC fire extinguisher for every 3,000 sq ft of useable space. Mounted to where there is a maximum travel distance of 75 feet to a fire extinguisher.

### 10. Door operations

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

[B] 1008.1.9 Door operations.

Except as specifically permitted by this section egress doors shall be readily openable from the egress side without the use of a key or special knowledge or effort.

[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.

#### 11. Duct detection for AHU

ACTION REQUIRED: Duct detection required for all AHU suppling more than 2,000 cfm

#### 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.

## Building Plan Review Reviewed By: Joe Frogge Pending

1. 2012 IBC 501.2 – Premises identification. New and existing buildings shall have approved numbers or letters. Each character shall not be less than 3 inches high with a minimum stroke width of 0.5 inch. They should be installed on a contrasting background and be plainly legible and visible from the street or road fronting the property. When required by the fire code official, address numbers shall be provided in additional approved locations to facilitate emergency response. Address numbers and letters shall be Arabic numbers or alphabetical letters. Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other approved sign or means shall be used to identify the structure. Address numbers shall be maintained. In multi-tenant commercial buildings where tenants have multiple entrances located on different sides of the building, each door shall be addressed. Address characters shall be capable of being illuminated by an internal or external lighting source.

Action required: Comment is for informational purposes. Address listed on drawings and application is incorrect. Correct address # is 2640.

2. The shell permit for this project is still underway.

Action required: No type of occupancy to be granted until shell permit has been closed.

3. 2012 IBC 1006.1 Illumination required. The means of egress, including the exit discharge, shall be illuminated at all times the building space served by the means of egress is occupied.

Action required: Provide emergency light at exterior of exit light at conference room.

4. A code analysis shall be provided which includes but is not limited to occupancy type, occupant load, construction type, actual area, height and floors, allowable area, height and floors, and the codes to which the project is designed.

Action required: Provide complete code analysis.

5. 2012 IBC 1015.1 – Exits or exit access doorways from spaces. Two exits or exit access doorways from any space shall be provided where one of the following conditions exists: 1. The occupant load of the space exceeds one of the values in Table 1015.1. 2. The common path of egress travel exceeds one of the limitations of Section 1014.3. 3. Where required by Section 1015.3, 1015.4, 1015.5 or 1015.6. Where a building contains mixed occupancies, each individual occupancy shall comply with the applicable requirements for that occupancy. Where applicable, cumulative occupant loads from adjacent occupancies

shall be considered in accordance with the provisions of Section 1004.1.

2012 IBC 1015.2.1 – Two exits or exit access doorways. Where two exits or exit access doorways are required from any portion of the exit access, the exit doors or exit access doorways shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimensions of the building or area to be served measured in a straight line between exit doors or exit access doorways. Interlocking or scissor stairs shall be counted as one exit stairway. (See code section for possible exceptions.)

Action required: Provide 2 marked exits out of office area spaced appropriately apart.

6. ICC A117.1-2009 604.3.1 – Clearance width. Clearance around a water closet shall be 60 inches minimum in width, measured perpendicular from the sidewall.

Action required: Modify design to demonstrate compliance. This applies to handicap stalls as well as single occupant restrooms near dock.

7. Unified Development Ordinance Article 7, Section 7.180.E

Roof mounted equipment – All roof-mounted equipment shall be screened entirely from view by using parapet walls at the same height as the mechanical units. For additions to existing buildings that do not meet this standard, individual screens will be permitted, with the design subject to approval by the Director.

Action required: Make needed corrections to drawings that provide details as to how mechanical equipment will be screened per referenced UDO section. (not all parapets appear to be tall enough to accomplish complete 4 side screening)

8. Unified Development Ordinance Article 7, Section 7.180.F Ground mounted equipment – Ground mounted equipment shall be totally screened from view by landscaping or masonry wall up to a height of the units to be screened.

Action required: Make needed corrections to drawings that provide details as to how mechanical equipment will be screened per referenced UDO section.

9. 2011 NEC 210.63 Heating, Air-Conditioning, and Refrigeration Equipment Outlet. A 125-volt, single-phase, 15- or 20-ampere-rated receptacle outlet shall be installed at an accessible location for the servicing of heating, air-conditioning, and refrigeration equipment. The receptacle shall be located on the same level and within 25 feet of the heating, air-conditioning, and refrigeration equipment. The receptacle outlet shall not be connected to the load side of the equipment disconnecting means.

Action required: Provide convenience power at ground mounted condensing units as well as rooftop equipment.

10. Support of furnaces.

Action required: Provide construction details for floors that will be supporting furnaces.

11. 2012 IMC 306.5 Equipment and appliances on roofs or elevated structures. Where equipment requiring access or appliances are located on an elevated structure or the roof of a building such that personnel will have to climb higher than 16 feet above grade to access such equipment or appliances, an interior or exterior means of access shall be provided. Such access shall not require climbing over obstructions greater than 30 inches in height or walking on roofs having a slope greater than 4 units vertical in 12 units horizontal. Such access shall not require the use of portable ladders. Where access involves climbing over parapet walls, the height shall be measured to the top of the parapet wall.

Permanent ladders installed to provide the required access shall comply with the following minimum design criteria:

1. The side railing shall extend above the parapet or roof edge not less than 30"

(see code section for additional construction requirements)

Action required: Provide safety railing at furnaces that are within 10' of the edges of elevated surfaces.

12. 2012 IBC 1606.2 Design dead load. For purposes of design, the actual weights of materials of construction and fixed service equipment shall be used. In the absence of definite information, values used shall be subject to the approval of the building official.

Action required: Provide verification that roof structure will support additional load.

13. 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: Provide expansion tanks at water heaters or provide verification that water heaters installed will not require expansion tanks in the manufacturer's written instructions.

14. Natural gas piping not specified.

Action required: Provide NG piping specifications.

15. Vent information missing.

Action required:

- Provide vent sizes at water closets.
- Provide vent connections at elevated floor drains (they do not qualify for wet venting)

16. add Joe's email text for marking requirements???

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.