## **PLAN REVIEW CONDITIONS**

August 19, 2021

TRI Architects 9812 Manchester rd St. Louis, MO 63119

Permit No: PRCOM20213548

Project Title: SIGNATURE AT WEST PRYOR PHASE 2 - BUILDING 1
Project Address: 2100 NW LOWENSTEIN DR, LEES SUMMIT, MO 64081

Parcel Number: 237161

Location:

Type of Work: NEW MULTI-FAMILY

Occupancy Group: RESIDENTIAL, MULTI-FAMILY Description: NEW 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.

Development Services Department (816) 969-1200

Fire Department (816) 969-1300

## **Fire Plan Review**

Reviewed By: Michael Weissenbach

**Approved with Conditions** 

1. 2018 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.

(Verified At Inspection)

Post occupant load signs in assembly areas.

8/19/2021

Post occupant load sign in pool area at 294

2. 2018 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)

Provide PE stamped electronic shop drawings for the fire alarm system to mike.weissenbach@cityofls.net.

3. 2018 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).

(Verified At Inspection)

Buildings may need multiple sides addressed due to visibilty from the roadway.

4. 2018 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)

Order a knox box for each building at knoxbox.com. Placement to be made by the FDC.

5. 2018 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)

Provide PE stamped electronic shop drawings for the fire sprinkler system to mike.weissenbach@cityofls.net

Note: Class 1 Standpipes will be required. 4 Inch Storz is the fitting size for the FDC.

6. 2018 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.

(Informational Purposes)

Call (816)969-1300 to schedule testing.

8. 2018 IFC 506.1.2 Key boxes for non-standardized fire service elevator keys. Key boxes provided for non-standardized fire service elevator keys shall comply with Section 506.1 and 506.2 or as approved by the fire code official.

(Action Required)

Order a elevator key box for the elevators from knoxbox.com. Placement to be made next to the elevator on the first floor.

Building Plan Review Reviewed By: Joe Frogge Pending

1. The following report represents all buildings on site.

Action required: Comment is for informational purposes.

2. The building permit for this project cannot be issued until the Development Services Department has received, approved, and processed the Final Development Plan.

Action required: Comment is for informational purposes.

3. 2018 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.

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

Action required: Provide complete truss packages for all buildings' floors and roofs or request deferral.

5. Prior to the installation or construction of any elevator equipment, an elevator equipment permit shall be obtained from the Missouri Department of Public Safety or its authorized representative.

Action required: Comment is for informational purposes.

6. Prior to the operation of any new elevator equipment or the issuance of the operating certificate, such elevator equipment shall be inspected by a licensed inspector. Testing must be performed in accordance with these rules and regulations. The testing must be witnessed by a licensed inspector.

Action required: Comment is for informational purposes.

7. Elevator Safety Act and Rules 701.361 - Each privately owned or operated installation and each installation owned or operated by the state of Missouri or any political subdivision of the state shall have a certificate of inspection and meet the safety code promulgated pursuant to sections 701.350 to 701.380.

Action required: Comment is for informational purposes.

8. 2018 IBC 502.1 Address identification. New and existing buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be a minimum of 4 inches high with a minimum stroke width of ½ inch. Where required by the fire code official, address identification shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road and the building address cannot be viewed from the public way, a monument, pole or other approved sign or means shall be used to identify the structure. Address identification shall be maintained.

Action required: Audit addressing plans and revise. Several instances of even numbered rooms on wrong side and vice versa.

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

Action required: Provide separate project costs, not including site work, for each apartment structure and the maintenance building. (3 different permits so 3 different calcs)

10. 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 code analysis for maintenance building.

- 11. 2018 IBC 703.2 Fire-resistance ratings. The fire-resistance rating of building elements, components or assemblies shall be determined in accordance with the test procedures set forth in ASTM E 119 or UL 263 or in accordance with Section 703.3. The fire-resistance rating of penetrations and fire-resistant joint systems shall be determined in accordance Sections 714 and 715, respectively.
- 2018 IBC 703.7 Marking and identification. Where there is an accessible concealed floor, floor-ceiling or attic space, fire walls, fire barriers, fire partitions, smoke barriers and smoke partitions or any other wall required to have protected openings or penetrations shall be effectively and permanently identified with signs or stenciling in the concealed space. Such identification shall:
- 1. Be located within 15 feet of the end of each wall and at intervals not exceeding 30 feet measured horizontally along the wall or partition.
- 2. Include lettering not less than 3 inches in height with a minimum 3/8 inch stroke in a contrasting color incorporating the suggested working, "FIRE AND/OR SMOKE BARRIER PROTECT ALL OPENINGS," or other wording.

## Actions required:

- A) Revise fire rated wall assembly details/sections to show nail/screw patterns and any other information relevant for a complete installation.
- B) Provide complete UL construction details for roof/ceiling assembly RC-2601. (ref: wall sections on sheets A316, A317, & A318)
- 12. 2018 IBC Exit Signs 1013.1 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: At building #1 - provide exit sign to direct egress out Lobby through Mail Room.

13. 2018 IBC 1109.11 Seating at tables, counters and work surfaces. Where seating or standing space at fixed or built-in tables, counters or work surfaces is provided in accessible spaces, at least 5 percent of the seating and standing spaces, but not less than one, shall be accessible. (see code for exception)

Action required: Counter tops at Amenity Rooms to be maximum 34" a.f.f.

14. 2018 IPC 403.1 Minimum number of fixtures. Plumbing fixtures shall be provided in the minimum number shown in Table 403.1, based on the actual use of the building or space. Uses not shown in Table 403.1 shall be considered individually by the code official. The number of occupants shall be determined by the International Building Code.

Action required: Unable to locate/identify mop/utility sinks which are required at each building.

15. 2018 IBC 1209.2 Finish Materials. Walls, Floors and partitions in toilet and bathrooms shall comply with Sections 209.2.1 through 1209.2.4.

2018 1209.2.1 Floors and wall bases. In other than dwelling units, toilet, bathing and shower room floor finish materials shall have a smooth, hard, nonabsorbent surface. The intersections of such floors with walls shall have a smooth, hard, nonabsorbent vertical base that extends upward onto the walls not less than 4 inches.

2018 1209.2.2 Walls and partitions. Walls and partitions within 2 feet of service sinks, urinals and water closets shall have a smooth, hard, nonabsorbent surface, to a height of not less than 4 feet above the floor, and except for structural elements, the materials used in such walls shall be of a type that is not adversely affected by moisture. (See code section for possible exceptions.)

1209.2.3 Showers. (see code for details)

1209.2.4 Waterproof joints. (see code for details)

Action required: Specify compliant wall finish materials at public restrooms and mop sinks. If paint is used it must be epoxy based.

16. 2018 IBC 1803.1 General. Geotechnical investigations shall be conducted in accordance with Section 1803.2 and reported in accordance with Section 1803.6. Where required by the building official or where geotechnical investigations involve in-situ testing, laboratory testing or engineering calculations, such investigations shall be conducted by a registered design professional.

Action required: Provide soils report to justify design assumption of soil bearing capacity greater than 2,000psf.

- 17. 2017 NEC Article 210.8 (B) Other Than Dwelling Units. All 125-volt, single-phase, 15- and 20-ampere receptacles installed in the locations specified in 210.8(B)(1) through (10) shall have ground-fault circuit-interrupter protection for personnel.
- (1) Bathrooms
- (2) Kitchens
- (3) Rooftops
- (4) Outdoors
- (5) Sinks where receptacles are installed within 6 feet of the outside edge of the sink.
- (6) Indoor wet locations
- (7) Locker rooms with associated showering facilities
- (8) Garages, service bays, and similar areas other than vehicle exhibition halls and showrooms.
- (9) Crawl spaces at or below grade level.
- (10) Unfinished portions or areas of the basement not intended as habitable rooms. (refer to code for exceptions)

Action required: Modify drawings to show that all receptacles at dwelling unit kitchen counters and maintenance building garage will by GFCI protected.

- 18. 2017 NEC Article 210.52 (A) General Provisions. In every kitchen, family room, dining room, living room, parlor, library, den, sunroom, bedroom, recreation room, or similar room or area of dwelling units, receptacle outlets shall be installed in accordance with the general provisions specified in 210.52(A)(1) through (A)(4).
- (1) Spacing. Receptacles shall be installed such that no point measured horizontally along the floor line of any wall space is more than 6 feet from a receptacle outlet.
- (2) Wall Space. As used by this section, a wall space shall include the following:
- 1. Any space 2 feet or more in width (including space measured around corners) and unbroken along the floor line by doorways and similar openings, fireplaces, and fixed cabinets that do not have countertops or similar work surfaces.
- 2. The space occupied by fixed panels in walls, excluding sliding panels.
- 3. The space afforded by fixed room dividers, such as freestanding bar-type counters or railings.
- (3) Floor Receptacles. Receptacle outlets in or on floors shall not be counted as part of the required number of receptacle outlets unless located within 18 inches of the wall.
- (4) Countertop and Similar Work Surface Receptacle Outlets. Receptacles installed for countertop and similar work surfaces as specified in 210.52(C) shall not be considered as the receptacle outlets required by 210.52(A).

(D) Bathrooms. At least one receptacle outlet shall be installed in bathrooms within 3 ft of the outside edge of each basin. (see code for location regulations)

Action required: Additional receptacles required in dwelling units. (look for wall sections 2' or more in width)

19. 2018 IMC 607.5 Where required. Fire dampers, smoke dampers, combination fire/smoke dampers, ceiling radiation dampers and corridor dampers shall be provided at the locations prescribed in Sections 607.5.1 through 607.5.7. Where an assembly is required to have both fire dampers and smoke dampers, combination fire/smoke dampers or a fire damper and smoke damper shall be required.

Action required: Fire damper missing at AHU-2/7 on sheet M118.

## 20. Protection of Potable Water System

2018 IPC 305.4 Freezing. Water, soil, and waste pipes shall not be installed outside of a building, in attics or crawl spaces, concealed in outside walls, or in any other place subjected to freezing temperatures unless adequate provision is made to protect such pipes from freezing by insulation or heat or both. Exterior water supply system piping shall be installed not less than 6" below the frost line (42" below grade) and not less than 12 inches below grade.

Action required: Provide means of heat to protect maintenance building plumbing from freezing.

- 21. 706.5 Horizontal continuity. Fire walls shall be continuous from exterior wall to exterior wall and shall extend not less than 18 inches (457 mm) beyond the exterior surface of exterior walls. Exceptions:
- 1. Fire walls shall be permitted to terminate at the interior surface of combustible exterior sheathing or siding provided that the exterior wall has a fire-resistance rating of not less than 1 hour for a horizontal distance of not less than 4 feet (1220 mm) on both sides of the fire wall. Openings within such exterior walls shall be protected by opening protectives having a fire protection rating of not less than 3/4 hour.
- 2. Fire walls shall be permitted to terminate at the interior surface of noncombustible exterior sheathing, exterior siding or other noncombustible exterior finishes provided that the sheathing, siding or other exterior noncombustible finish extends a horizontal distance of not less than 4 feet (1220 mm) on both sides of the fire wall.
- 3. Fire walls shall be permitted to terminate at the interior surface of noncombustible exterior sheathing where the building on each side of the fire wall is protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.

Action required: Roof system penetrations within 4' of fire walls not allowed. Relocate plumbing vents.

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.