

# 1000 W Nifong Blvd., Bldg. 1 Columbia, Missouri 65203 (573) 447-0292

July 26, 2024

City of Lee's Summit Development Services 220 SE Green Street Lee's Summit, MO 64063

Re: The Village at Discovery Park - Lot 4 - PL2024021 Response Letter

City reviewers,

This letter is in response to the Commercial Final Development Plan Applicant's Letter dated July 01, 2024. The engineering plans have been revised to address the comments. The original comments are below and follow the order as shown in the review comments. Our responses are in bold, and follow each individual comment.

## **Planning Review**

1. DRIVEWAY/DRIVE AISLE DIMENSIONS. 1) Revise the parking lot drive aisle dimensions labeled on the Site Plan (Sheet CE 6.1) to exclude the curb, meaning only dimension the drive aisles from face-of-curb to face-of-curb. 2) Dimension the parking lot entrance on the south side of the proposed building, as well as the drive aisle entrances to the east-west parking area south of the parking garage. Drive aisles serving two-way traffic shall have a minimum 24' width of drivable pavement (i.e. excluding curb).

All lanes as part of this plan have a minimum 26' back of curb dimension, there is 25' of driving width.

2. PHOTOMETRIC PLAN. The photometric plan provides no information on the wall-mounted exterior light fixtures to be used on the site. The information provided is only for the pole-mounted parking lot lighting. Include the foot-candle levels for the wall-mounted fixtures on the plan and the wall-mounted fixture information in the Site Lighting Fixture Schedule. Fixtures shall comply with the requirements of UDO Sections 8.220, 8.260 and 8.270.

Any wall-mounted light fixtures as part of this development are not intended to provide general illumination. All wall-mounted fixtures are intended to be considered as accent lights per UDO 8.270. The only other building exterior lighting will be full-cut off

downlights installed in canopies at building entrances, which do not contribute to the site lighting calculations.

3. MECHANICAL SCREENING. To comply with City ordinance, the roof-mounted equipment shall be fully screened from view by raising the building parapet walls to a height at least equal to the units being screened. Please account for the added height from any curbs on which the RTUs will be placed when designing the parapet wall heights.

Perspective drawings were included on the original submittal to show adequate screening of rooftop equipment.

4. LANDSCAPE PLAN. No landscape plan was submitted with the application plan set. A landscape plan shall be provided for review. Landscaping shall comply with the requirements of UDO Sections 8.720, 8.750, 8.790 and 8.810.

#### Landscape plan is now included.

5. TRASH ENCLOSURE. Trash enclosure areas shall be improved with a Portland cement concrete pad and a Portland cement concrete approach 30 feet in length, measured from the enclosure opening. The pad and approach shall be improved with a minimum six inches of full depth unreinforced Portland cement concrete constructed on a sub-grade of four inches of granular base course.

Trash enclosure approach was increased to 30' in length. Detail 7 on CE 7.1 shows the cross-section for heavy duty pavement as labeled on CE 6.1. This cross section is above the minimum requirements.

6. PARKING LOT BOUNDARY. A temporary asphalt curb shall be constructed along the south boundary of the proposed parking lot where it will be expanded in the future for development of the project site to the south. Staff will work with the developer on the timing or need for the actual installation of the temporary asphalt curb depending on the timing of the development of the project site to the south.

Label has been added to CE 6.1 that calls out installation of a temporary asphaltic curb.

7. FAA FORM 7460. A Form 7460 shall be completed and submitted to the FAA, and comments received back prior to the issuance of any building permit for the subject site.

FAA form is now included with this submittal.

#### **Engineering Review**

1. Submit the proposed private waterline easement and public sanitary easement documents for review and approval. Please note that these easements must be in place prior to issuance of any permit.

It's our understanding that our client's attorney and the City's attorney are working together to determine the best way to cover utilities,

2. Show proposed private waterline easement and all the water main connection locations and type, including valves and restraints. The fire line (please call it fire line instead of sprinkler line) will be connected with a tee and a valve at the BFPD per LS 6901 I. Fire Lines). Grade the vault area to drain and provide a note indicating how the vault sump will drain.

Labels were added and revised to specify water main connections, locations, and types. Verbiage for the fire line was changed to reflect this comment, the BFPD is to be installed inside the building.

3. Show size and location of water service lines and water meters per LS 6901 L. Water Meters). The building service line and the irrigation line will each have their own connection to the water main by corporation stop with separate meters. If utilizing a 3" meter, the connection will be by a tee and the vault provide by the applicant. Add WAT-13 standard detail to the plans. Please note that the City Development Services inspectors do not use the MEP plans to inspect, please add all installation information to the civil plans.

Water main connection was revised to be two 2" service lines with separate 2" meter pits.

4. Soft type "K" copper service line (diameter in accordance with the City standard details) shall extend a minimum of 10 feet beyond the meter well (between the meter and the private customer) per LS 6901 K. Service Lines.

Utility labels on CE 4.1 were revised to clarify installation of service lines. Dimension was also added to show a minimum of 10' between the meters and tying together to a 3" service line.

5. Label the existing manholes with the City numbering system. Proposed label of EX. MH 16-107 should be EX. MH 16-108 (verify). EX. MH A3 is EX. MH 16-109. EX. MH A4 is EX. MH 16-110. Label other existing manholes going south with EX. MH 16-111 and EX. MH 16-112 respectively.

Existing manholes are labeled to reflect this comment.

6. Show the connection of the sanitary stub to the main as a wye. Label the lateral connection to the stub with a coupler or max adapter, not a wye.

The stub is now shown as a wye at the main. Label for lateral connection to stub was updated to call out for a max adapter connection.

7. Include the following note on any profile sheet applicable: "Compacted Fill shall be placed to a minimum 18" above the top of the pipe prior to installation." Show and label the limits of the compacted fill placement in the Profile view. Use hatching for clarity.

Note and hatching added to CE 5.1.

8. Please review drops across structures and verify that they all meet the City's requirements shown in the Design and Construction Manual Section 5604.5.

All drops across structures are at least at the minimum requirements.

9. Verify that the pavement jointing plan is in accordance to the City Standard Detail Gen-10.

Pavement jointing plan is within accordance to City detail Gen-10.

10. Please verify and note that only ornamental trees and shrubs may be planted within any easements.

Only ornamental trees and shrubs are shown within any easements on CE 8.1. Note has been added to this sheet to clarify.

11. Submit the MDNR Land Disturbance Permit.

DNR land disturbance permit is included with this submittal.

12. The submitted estimate will not satisfy the requirements of the Unified Development Ordinance (Section 3.415) for the required documentation to calculate the Engineering Plan Review and Inspection Fee. This must be an itemized list of unit prices and quantities that includes all materials, labor, equipment and incidental work necessary to complete the entire project. Please resubmit an appropriate signed and sealed estimate.

Engineer's Cost estimate has been revised per UDO requirements.

#### **Fire Review**

1. All issues pertaining to life safety and property protection from the hazards of fire, explosion or dangerous conditions in new and existing buildings, structures and premises, and to the safety to fire fighters and emergency responders during emergency operations, shall be in accordance with the 2018 Fire Code.

#### Understood.

2. IFC 503.2.3 - Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all-weather driving capabilities.

All fire access lanes around the building shall be capable of supporting 75,000-pounds.

The proposed pavement is capable of the imposed load from a fire apparatus.

3. IFC 507.5.1 - 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.

Provide a hydrant plan to meet this requirement.

Additional waterline is proposed with fire hydrants to satisfy this code. Please see sheet CE 4.1 for waterline and fire hydrant plan.

4. IFC 503.3 - 503.3 Marking. Where required by the fire code official, approved signs or other approved notices or markings that include the words NO PARKING—FIRE LANE shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. The means by which fire lanes are designated shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility. Fire lanes may be marked in one or a combination of methods as approved by the fire code official. Curbs. All curbs and curb ends shall be painted red with four inch (4") white lettering stating "FIRE LANE—NO PARKING". Wording may not be spaced more than fifteen feet (15') apart. Where no curb exists or a rolled curb is installed, a 6-inch (6") wide painted red stripe applied to the concrete or asphalt with four inch (4") white lettering stating "FIRE LANE—NO PARKING. "Signs. In areas where fire lanes are required, but no continuous curb is available, one of the following methods shall be used to indicate the fire lane. Option 1: A sign twelve inches (12") wide and eighteen inches (18") in height shall be mounted on a metal post set in concrete a minimum of depth of eighteen inches (18") set back one foot (1') in from the edge of the roadway with the bottom of the sign being seven feet (7') from finished grade. Signs shall face oncoming traffic. Spacing of signs shall not exceed fifty feet (50') between signs. Signs shall be reflective material with a white color background with symbols, letters and border in red color. "FIRE LANE—NO PARKING". Option 2: A sign twelve inches (12") wide and eighteen inches (18") in height shall be mounted on the side of a structure or other permanent fixture approved by the Fire Code Official. The bottom of the sign being seven feet (7') from finished grade. Spacing of signs shall not exceed fifty feet (50') between signs. Signs shall be reflective material with a white color background with symbols, letters and border in red color. "FIRE LANE—NO PARKING".

Show posted fire lanes.

Sign locations have been added to CE 6.1. Additionally, there is a detail on sheet CE 7.3 for the proposed sign.

#### **Building Codes Review**

1. Amend detail 14/CE7.3 to show correct frost depth which is 36". Also the depth is measured to nearest surface, not just vertically.

### Detail has been updated.

2. Provide water use calculations to justify size of 3" water meter. (fyi - multiple 2" meters is often a more economical choice)

Two 2" meters are now proposed rather than one 3" meter.

3. WAT-11 detail is only valid for up to 2" water meter. Provide custom engineered pit design if you end up with 3" or larger meter.

Two 2" meters are now proposed.

Please review attached submittal and if there is any additional information needed you may contact by email at <a href="mailto:ndixon@crockettengineering.com">ndixon@crockettengineering.com</a> or at 573-447-0292.

Sincerely,

Crockett Engineering Consultants, LLC

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Nolan Dixon, EIT