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COMMENT RESPONSE

July 24, 2019

Jennifer Thompson, Planner
Development Services
City of Lee's Summit
220 SE Green St.
Lee's Summit, Missouri 64063

Re: Applicant number: PL2019018
Lee's Summit Senior Living Community
FINAL DEVELOPMENT PLAN

The following is in response to commercial development plan comments that have been sent in a letter dated July 09, 2019.

FIRE REVIEW

1. *COMMENT: 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 International Fire Code.*

   RESPONSE: Understood.

2. *COMMENT: D105.1 Where required. Where the vertical distance between the grade plane and the highest roof surface exceeds 30 feet (9144 mm), approved aerial fire apparatus access roads shall be provided. For purposes of this section, the highest roof surface shall be determined by measurement to the eave of a pitched roof, the intersection of the roof to the exterior wall, or the top of parapet walls, whichever is greater..*
   D105.2 Width. Aerial fire apparatus access roads shall have a minimum unobstructed width of 26 feet (7925 mm), exclusive of shoulders, in the immediate vicinity of the building or portion thereof. D105.3 Proximity to building. One or more of the required access routes meeting this condition shall be located not less than 15 feet (4572 mm) and not greater than 30 feet (9144 mm) from the building, and shall be positioned parallel to one entire side of the building. The side of the building on which the aerial fire apparatus access road is positioned shall be approved by the fire code official.
   D105.4 Obstructions. Overhead utility and power lines shall not be located over the aerial fire apparatus access road or between the aerial fire apparatus road and the building. Other obstructions shall be permitted to be placed with the approval of the fire code official.
   Action required: The fire lane along the west side of independent living shall be 26 feet (C200). Make adjustments to meet this requirement.

RESPONSE: See attached comment response letter from Olsson.

3. *COMMENT: IFC 503.3 - 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.*

RESPONSE: See attached comment response letter from Olsson.

4. *COMMENT: 01.4 Timing of installation. Where fire apparatus access roads or a water supply for fire protection are required to be installed, such protection shall be installed and made serviceable prior to and during the time of construction except where approved alternative methods of protection are provided. Temporary street signs shall be installed at each street intersection where construction of new roadways allows passage by vehicles in accordance with Section 505.2. IFC 507.1 - An approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises upon which facilities, buildings or portions of buildings are hereafter constructed or moved into or within the jurisdiction.*
Action required: Upgrades to the water supply, hydrants on site, and the asphalt base of the fire lanes shall be installed prior to construction..

RESPONSE: See attached comment response letter from Olsson. The contractor will be made aware of the requirments.

5. *COMMENT: IFC 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 Storz type fitting and located within 100 feet of a fire hydrant, or as approved by the code official.*

RESPONSE: See attached comment response letter from Olsson.

PLANNING REVIEW

1. *COMMENT: The proposed RTU's within the connecting area between the 3 story building and 1 story building will require a different solution for screening as seen from the east and west perspectives. The proposed louvre paneling system doesn't meet the UDO requirements for RTU screening. Staff suggests tucking them in closer to the north and south portions of the perspective buildings so it can be screened by those roof tops. Another solution would be to provide a parapet wall system perhaps with cement board finishing as shown in the preliminary development plan.*
Can a sight line elevation be provided from both the east and west perspectives within the area the RTU's are visible?
It appeared there were approximately 3 units exposed.

RESPONSE: The building elevations have been modified to use parapets to screen the mechanical units on the low roof.

2. *COMMENT: n the photometric sheet, label property line on east, west and south boundaries. Indicate the 100' perimeter distance from the south property line. All pole lights shall be a maximum height of 15 feet within the 100' perimeter area. Confirm the SL fixture within the island will be directed toward the proposed signage and the light will be shielded from Oldham Pkwy. The maximum wattage for fixtures on developments that adjoin residential uses and/or districts shall be limited to 175 watts maximum per head through the entire parking lot. Please revise the photometric plan accordingly.t.*

   RESPONSE: Refer to the attached comment response letter from Hoss and Brown.

3. *COMMENT: Please refer to Engineering comment regarding pavement thicknesses. Reference the UDO, Article 8..*

   RESPONSE: *: See attached comment response letter from Olsson.*

4. *COMMENT: The UDO requires a high impact buffer between this property and the adjoining property to the east. Staff can discuss in more detail at the applicant's meeting.*

   RESPONSE: See attached comment response letter from Olsson.

5. *COMMENT: Revise Sheet C200 to note the Side yard setback is 20 feet for Lot 1. The Special Use Permit for this use required the side yard setbacks to be doubled within the zoning district, thus requiring 20 feet. The Build Lines indicate this on the plan and plat..*

   RESPONSE: See attached comment response letter from Olsson.

6. *COMMENT: Provide elevation references on Sheet SP1.0 that correspond with the elevation and details on Sheets A1.0, A2.1, A2.2, A2.3, and A2.4.*

   RESPONSE: Sheet SP1.1 has been modified to include the elevation references.

ENGINEERING REVIEW

1. *COMMENT: A cursory review of the stormwater report showed that the wrong methodology was utilized. The City of Lee's Summit uses the "Comprehensive Control Strategy", which requires the calculation of an allowable release rate at different points of interest, along with 40 hour extended detention or volumetric reduction in lieu of 40 hour extended detention. In addition, the report states this area is located in the 0.2% chance flood zone. Are you sure this is the case? FEMA has two (2) different designations for zone x...one relates to being "minimal flood hazard", and the other zone x designates it is within the 0.2% chance flood zone. Please reconcile this discrepancy.*

   RESPONSE: See attached comment response letter from Olsson.

2. *COMMENT: MoDOT approval shall be required for the new entrance to Oldham Pkwy. This may be in the form of an email from MoDOT.*

   RESPONSE: See attached comment response letter from Olsson.

3. *COMMENT: Sheet C500: Please reference the water line plans contained elsewhere in the plan set (i.e., Sheet C509).*

   RESPONSE: See attached comment response letter from Olsson.

4. *COMMENT: C500: The method used to drain the sump of the backflow vault should be shown either on the plan view, or a modified standard detail. The sump may be drained in three ways: 1) daylight, 2) connection to a storm structure, or 3) construction of an infiltration trench.*

   RESPONSE: See attached comment response letter from Olsson.

5. *COMMENT: 500: A gate valve is required immediately prior to the backflow vault.*

   RESPONSE: See attached comment response letter from Olsson.

6. *COMMENT: The location of the water meter and sizing must be shown on the plans. Pipe type must be shown, and must conform to the soft copper requirements shown on the standard detail for the minimum distances shown on the standard detail.*

   RESPONSE: See attached comment response letter from Olsson.

7. *COMMENT: C503: A scale was not shown. It appears there may be instances where the slope is not 2.0% in the bottom of the detention basin. A minimum of 2.0% slope is required in the bottom of the basin as measured in any location within the bottom of the basin.*

   RESPONSE: See attached comment response letter from Olsson.

8. *COMMENT: C503: The 1% chance storm event water surface elevation must be shown graphically, and the elevation called-out. The minimum distance between any property line or building is 20 feet from this surface.*

   RESPONSE: See attached comment response letter from Olsson.

9. *COMMENT: General Comment: A profile view of all storm lines is required for any private or public storm line greater than 6 inches in diameter.*

   RESPONSE: See attached comment response letter from Olsson.

10. *COMMENT: C200: It would appear there is another bioretention area along the east side of the project? Please label*

RESPONSE: See attached comment response letter from Olsson.

11. *COMMENT: No review is being provided for the ADA-accessible ramps within right of way. Comments on these features shall be performed with the public street plan review.*

RESPONSE: See attached comment response letter from Olsson.

12. *COMMENT: It appears there are two (2) bioretention basins to be constructed with this project. Please identify these (e.g., bioretention basin #1, bioretention basin #2) on the general layout, grading plan, and other appropriate sheets.*

RESPONSE: See attached comment response letter from Olsson.

13. *COMMENT: Please add a note stating that the detention basins and bioretention basins shall be constructed prior to any other activity on the site.*

RESPONSE: See attached comment response letter from Olsson.

14. *COMMENT: General Comment Concerning Emergency Spillway: It appears the detention basin is being cut into the existing grade. Emergency spillway requirements may change due to the fact that a "dam" is not really being constructed, but rather, the basin is being cut-into the existing grade. You may wish to revisit this requirement, discuss in the report why or why it may not be required based on your assessment.*

RESPONSE: See attached comment response letter from Olsson.

15. *COMMENT: C503: Concrete low flow channels are not allowed in the City of Lee's Summit.*

RESPONSE: See attached comment response letter from Olsson.

16. *COMMENT: The hydraulic grade line for the design storm must be shown on the profile view of all storm lines greater than 6 inches in diameter.*

RESPONSE: See attached comment response letter from Olsson.

17. *COMMENT: Sheet C503: It is unclear what the outlet structure is referring to. Is this the control structure for bioretention basin #1? Shouldn't the bioretention basin be labeled?*

RESPONSE: See attached comment response letter from Olsson.

18. *COMMENT: Sheet C503: Please see comments concerning emergency spillways in cut areas. This may not be required based on these comments. The purpose of the emergency spillway is to ensure the integrity of a dam is not jeopardized during periods of clogged flow conditions, or higher-than-design storm events. If this features are installed in cut areas, then the consequences of overtopping would not appear to jeopardize the "dam",*

because in these cases, a "dam" doesn't exist. Please review, and discuss within the report.

RESPONSE: See attached comment response letter from Olsson.

19. *COMMENT: Sheet C504: Please provide additional context for this drawing. Perhaps street or highway labeling would show where this is located?*

RESPONSE: See attached comment response letter from Olsson.

20. *COMMENT: Sheet C504: Please see previous comments about the emergency spillway, and whether or not this pertains to the situation shown on the plans.*

RESPONSE: See attached comment response letter from Olsson.

21. *COMMENT: Sheet C504: Please be specific as to the location of the outlet structure in relation to this drawing. It does not appear clear from the notes or table. In the table, it appears this is called-out as an Area Inlet? Invert elevations, however, do not appear to match the "Outlet Structure Detail".*

RESPONSE: See attached comment response letter from Olsson.

22. *COMMENT: The private sanitary sewer is shown with an 8 inch line connecting to the existing manhole. If using 8 inch private sanitary sewer line with a direct-connection to the manhole, then manholes should also be shown for the private sanitary sewer. Cleanouts are not allowed. If using private sanitary sewer line less than 8 inches, a cut-in wye must be installed along the existing public sanitary sewer line, a minimum of 4 feet from the outside of the manhole to the outside of the wye. In this case, no direct connection to the existing sanitary sewer manhole is allowed. COMMENT: Sheet C503: It is unclear what the outlet structure is referring to. Is this the control structure for bioretention basin #1? Shouldn't the bioretention basin be labeled?*

RESPONSE: See attached comment response letter from Olsson.

23. *COMMENT: Sheet C509: Please show the vaults and meters in bold, to denote these are proposed improvements. As shown, they appear to be existing improvements because they are greyed-out.*

RESPONSE: See attached comment response letter from Olsson.

24. *COMMENT General Note about Utility Plan on Sheet C500: Please add a prominent note which references the "Water System Plan" on Sheet C509.*

RESPONSE: See attached comment response letter from Olsson.

25. *COMMENT: The pavement detail does not meet the Unified Development Ordinance (UDO) in terms of pavement thickness or subgrade design. In general, the following requirements apply: 1) drive aisles and parking stalls require a minimum of 1.5 inch surface course, with a minimum 4 inch base course, on top of 6 inches of aggregate base, and over 6 inch minimum thickness of chemically-stabilized native subgrade, or in lieu of chemically-stablized subgrade, geogrid that meets the specifications of the City of Lee's Summit. Heavy truck traffic lanes where fire department, trash delivery, or other truck traffic has the same requirement, except the base must be a minimum of 5 inches thick rather than 4 inches thick.*

RESPONSE: See attached comment response letter from Olsson.

26. *COMMENT: Curb and gutter detail must be provided, which clearly shows that the subgrade design discussed in the above comment is extended a minimum of 1 foot beyond the back of curb..*

RESPONSE: See attached comment response letter from Olsson.

27. *COMMENT: It appears that the backflow vault is shown within a public easement, which is not allowed.*

RESPONSE: See attached comment response letter from Olsson.

28. *COMMENT: A profile view of the fire line is required. Other utilities should be shown on this profile view to eliminate utility conflicts. Depth of cover should be specified (i.e., minimum of 42 inches).*

RESPONSE: See attached comment response letter from Olsson.

29. *COMMENT: The domestic water meter vault should be shown within a public easement. As shown, it appears to be outside the limits of the easement?*

RESPONSE: See attached comment response letter from Olsson.

30. *COMMENT: KCMMB concrete of 8 inch thickness must be used for all new commercial entrances from non-MoDOT roads.*

RESPONSE: See attached comment response letter from Olsson.

31. *COMMENT: An itemized and sealed Engineer's Estimate of Probable Construction Costs should accompany your final submittal drawings. The Engineering Plan Review and Inspection Fee is based on this estimate. Items to include in the estimate are: 1) storm lines greater than 6 inches, 2) storm structures, 3) sanitary sewer lines and structures, 4) sanitary manholes, 5) wye connections, 6) water lines and connections, 7) special water meter vaults for 3 inch meters, 8) fire hydrants, 9) valves, 10) tees, bends, and other items, 11) thrust blocks and straddle blocks, 12) grading to establish proper drainage, 13) grading*

for detention basins and bioretention basins, 14) detention basin outlet structures, 15) paving, 16) subgrade, including aggregate base and chemically-stabilized subgrade/geogrid extending a minimum of one (1) foot beyond the back of curb, 17) commercial entrances, 18) curb and gutter, 19) rip rap, 20) turf reinforcement mat, 21) erosion and sediment control devices and measures, and 22) final restoration, including sodding, seeding, fertilizer, mulch, and topsoil.

RESPONSE: See attached comment response letter from Olsson.

TRAFFIC REVIEW

1. *No comments*

BUILDING CODES REVIEW

1. *Depth of secondary electrical wiring is noted as 18" deep.Action required: Any wiring under parking or drive ways must be minimum 24" deep. To be field verified.*

RESPONSE: See attached comment response letter from Hoss and Brown.