

February 5th, 2021

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

RE: Final Development Plan PL202050

Engineering Plan Review

We are responding to your comments dated September 18, 2020 and are submitting with this letter, the revised plans. Please find our responses to your plan markups below.

If you have any questions or need additional information, please do not hesitate to contact me by phone at (816) 442-6056 or by email at nheiser@olsson.com.

Thank You,

Nicholas D. Heiser

Fire Review (Jim Eden)

• 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.

Action required: The FDC's for buildings 1,2,3,5, 10 and 12 shall be within 100-feet of a fire hydrant.

FDC locations and fire hydrant locations have been revised to meet the 100' maximum distance requirement.

• 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.

Action required: Fire Lanes shall be posted by signage or a combination of signs and painted curbs. Indicate the areas to be marked.

Response: Sheet C207 has been added for fire lane striping

• 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. Action required: Additional hydrants needed to meet this requirement for Buildings 2 and 5. The distance to a hydrant is measured around the building and signification obstructions.

Response: Additional hydrants have been added as requested.

 D105.3 Proximity to building. One or more of the required access routes meeting this condition shall be located not less than 15 feet and note greater than 30 feet 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. Action required: How will the intent of this requirement be met?

Response: Layout revisions have been made to meet this requirement. Drive aisles have been extended along the front of Building 2 and Building 3. All other buildings have been shifted closer to the curb/parking to be 30' from the drive aisle.

 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: Provide the square footage of the largest building and construction type. Fire flow shall be provided in accordance with IFC Table B105.1(2) and is a allowed a 50% reduction

for a sprinkler system per amended IFC Table B105.2.

Response: The largest building SF is 11,570 SF per floor and 45,905 total SF. The construction type is V-A. The flow calculations for the site were provided with the initial submittal.

 There shall be no vertical combustible construction, or the storage of combustible building materials on site, until all fire hydrants are installed and functional and all fire access lanes (concrete or a base of asphalt) are installed.

Response: Acknowledged

Planning Review (Jennifer Thompson)

1. The Developer shall execute a mutually satisfactory development agreement with the City, which addresses, at a minimum, an off-site landscape easement, road improvements on Lee's Summit Road and possible down stream stormwater improvements. No building permits shall be issued for any structure in the development until written proof is provided to the City that the development agreement has been recorded in the Jackson County Recorder of Deeds Office.

Response: Development agreement is in process.

2. Road improvements shall be provided on both sides of the street for the length of the applicant's development.

Response: Noted. Plans have been submitted to the city for road improvements to NE Douglas St./ Lee's Summit Road.

3. For any development within two (2) miles of the Lee's Summit Municipal Airport property or any construction that is more than 200 feet tall, a FAA Form 7460 shall be completed and submitted to the FAA, and either a copy of the FAA approval or FAA review comments indicating their conditions for approval shall be submitted to the City prior to the issuance of any building permits.

Response: Acknowledged. FFA forms are attached with this resubmittal.

4. Upon approval of the proposed rezoning by City Council, the applicant will become responsible to provide the appropriate level of right-of-way maintenance (mowing) during each growing season with the defined area abutting their property as defined and outlined in the City's Mowing Policy, approved by Council on November 3, 2005.

Response: Acknowledged.

5. Sign permits shall be obtained prior to installation of any signs through the Development Services Department. All proposed signs must comply with the sign requirements of Article 9 of the UDO.

Response: Acknowledged.

- 6. The minor plat shall be approved and recorded prior to any building permits being issued. Response: Acknowledge. Currently waiting on response regarding the property street address prior to resubmitting the minor plat.
- 7. Several drive aisle widths have not been met within rows of parking and at areas where there are islands. A minimum of 26' (excluding curb and gutter) is required to meet drive aisle spacing requirements.

Please label dimensions for all drive aisles, including areas where there are islands.

Response: Drive aisle widths have be revised to have all meet 26' width requirement and additional dimensions have been added to sheets C401-C406.

8. Provide a landscape worksheet that details the required quantities of landscaping required for the site. An electronic version can be sent.

Once the worksheet is submitted staff will evaluate the landscaping. It appears it matches the approved PDP, however I would prefer to have the landscape worksheet completed for verification.

Any trees located within an easement shall be of an ornamental variety.

Response: Landscape worksheet has been provided with this resubmittal.

9. Please provide color elevations.

Also, the pdp approved elevations had much more detail on the buildings on the fronts, backs, and sides (windows, stucco, color variations). The submitted elevations seems to be lacking these elements. Additional discussion is needed.

Response: Color elevations are attached with this resubmittal.

10. I didn't see a trash enclosure elevation, but may have missed it in the plan set, please direct me to the correct sheet or provide an elevation

Response: Trash enclosure details can be found on Sheet ASD1.0.

11. The UDO prohibits wheel stops/parking lot blocks. Is there a reason for this design? Also for the ribbon curbing?

Response: The ribbon curb and wheel stops work in conjunction to allow parking lot stormwater runoff to discharge into green spaces designed to detain the water quality volume in either underground filtration trenches or sump areas designed to pond a specific amount and depth of water until being captured by nearby storm drain.

12. Add detail within the vicinity map (street names, etc.).

Response: Street names have been added to the vicinity map and are also shown on the overall project area map in the middle of the Title Sheet C101.

13. Can you direct me to the Sheet # that would illustrate building setbacks/parking lot setbacks from the property lines and between buildings?

Response: Building setbacks are label on Sheets C104-C206, the General Layout & Site Plans sheets.

14. Provide the surrounding property information.

Response: Adjacent property information has been added to Sheet C103.

15. Provide the number of stories and total sq. footage for each building.

Also provide a breakdown of the unit types for each building. (1, 2, 3 bedroom, etc.).

Response: Requested information has been added to the cover sheet.

16. Provide a dimension for the typical width of a parking space.

Response: Additional dimensions for parking space widths have been added to Geometric Plans Sheet (C401-C406).

17. Label the building line setbacks and all proposed utility easements. A 50' B/L was shown on the pdp along Douglas. A 10' utility easement was shown on the pdp along

Douglas.

Response: Labels for the building setback and utility easement have been added to plans and will display throughout the plan set. The labels have been rev clouded on Sheets C201-206.

18. What is the height of the retaining walls?

Response: Spot elevations have been provided at the top and bottom of the retaining walls on Sheets C302-C311.

19. Provide a photometric plan. Also provide the manufacture's specification sheets for all proposed exterior lighting, to include parking lot lighting.

Response: Photometric plan and lighting specs are attached with this resubmittal.

20. Indicate the location of the ground mounted units and the method of screening.

Response: Screening for the ground mounted units is shown on the landscape plans. Sheets L310-L315.

21. Please label the little squares that are shown on the roof tops.

Response: The squares on the roof are vents and are now labeled on Sheets A3.0 – A3.2.

22. Label the site distance triangles at the driveway entrance. Please refer to article 8 of the UDO for the definition of a site triangle.

Response: Site distance exhibits have been provided with the original submittal and updated for this resubmittal.

23. A high and medium impact buffer was required on the northwest and southwest portions of the site. A modification was granted to allow offsite existing mature landscaping in lieu of the buffer on said property. Graphically provide a general number count, species, height, caliber for said trees that are located offsite. Also an offsite landscape easement is needed.

Response: In responding to comments during the PDP process, photos were provided to ensure adequate quantity and quality of existing vegetation within the offsite landscape easement. These were accepted as a modification to serve as landscape buffer. The offsite landscape easement has been submitted to the city for review, ensuring that the vegetation will be preserved.

Engineering Review (Sue Pyles)

1. This review does not include a review of the storm sewer system. That review will be completed in conjunction with the off-site detention basin plan review since the entire system functions together. Those comments will be sent under separate cover next week.

Response: Noted.

2. Submit an Engineer's Estimate of Probable Construction Costs.

Response: Cost estimate is attached with this resubmittal.

- 3. Site Plan Sheets C201-C206:
 - Sheet C201: The curb types are reversed in front of Future Bldg. 10.
 - Sheet C202: The ST1 leader west of Future Bldg. 13 does not point to the storm line.
 - Sheet C202: Label the dry c & g at least once on this sheet with the construction note ##.
 - Clearly label all easement dimensions throughout the plan set.
- Sheet C203: The Construction Note 02 leader at the island east of the south end of Bldg. 1 does not point to the curb & gutter.
- Sheet C203: Label the private sidewalk with the construction note ##.
- Include a Construction Note ## for heavy duty pavement and label it at least once on every sheet shown.

Response: All these items have been revised with this resubmittal.

- 4. Grading Plan Sheet C301:
 - All proposed contours must tie back into existing contours.
- Please confirm in the comment response letter that this plan matches the grading plan previously submitted with the mass grading plans.

Response: The grading in the site plans and mass grading plans match. The mass grading plans have been updated and resubmitted at this time.

- 5. Spot Elevation Plan Sheets C302-C307:
 - Label Retaining Walls.
 - Include a legend for hatching/shading used.
 - Remove end sections. If rip-rap is left shown, label with page reference for details.

Response: Retaining walls are now labeled. Legend has been added, and the riprap and end sections have been removed from these sheets.

6. Spot Elevation Plan Sheets C308-C311: Please revise the sheet name in the title block to match the Index of Sheets.

Response: Sheet names have been revised to match the index of sheets.

- 7. Sanitary Plan Sheets C701-C70:
 - Label all Profiles with the line number.
- The sanitary line exceeds the 20' maximum allowed depth between MH 1-2 & 1-5, and MHs 1-2, 1-3, and 1-4 exceed the maximum depth allowed. Please revise

accordingly.

- Label all flowlines entering each MH in all Profile views.
- Relocate MHs 1-3 & 1-7 flowline information overlapping text for clarity in the Profile views.
- Service line connections require a wye, not a tee fitting. Revise plans accordingly.
- Show cleanouts at required spacing on all service lines.
- Dimension all vertical separations of less than 2' in the Profile views and all horizontal separations from structures of less than 10' in Plan views. Revise any locations that don't meet separation requirements.
 - Sheet C703: Label MH 1-5 as an Outside Drop MH in the structure table.
 - Sheet C706: Label the match line and MHs 2-3 & 2-4 in the Plan view.

Response:

- Each profile view includes the alignment name at the bottom of the profile view.
- The sewer depth is driven by the future buildings 12 and 13 being walkouts, and the requirement to only connect to the existing public sanitary system at one location. This is a private sewer system that will be owned and maintained by the property owner.
- All flowline information has been added to the profile views for each structure.
- Flowline information for 1-3 and 1-7 have been revised for clarity.
- All service lines connections have been changed to wyes.
- Cleanouts have been added all service lines when required.
- All vertical separations meet the minimum required of 18" and have been labeled in the profile views. All paralleling water mains and storm sewers maintain greater than 10' of horizontal separation.
- MH 1-5 is now labeled as an outside drop.
- Match line and MHs 2-3 & 2-4 are now labeled.
- 8. Water Plan Sheets C801-C80:
 - Label all Profiles with the line number.
 - Show and label all sanitary crossings in the Profile views.
 - Update all service line material labels to call out the desired pipe material.

Response:

- All profile views include the alignment name at the bottom of the profile.
- All sanitary crossings have been added to the profiles.]
- All service line material has been revised to be C900.
- 9. Sheet C901: The City requires 4" aggregate base under sidewalk. Please revise detail accordingly.

Response: Detail has been revised as requested.

Traffic Review (Micheal Park)

1. Update Sight Distance diagrams to also include a reference point behind the pedestrian

crossing, where a vehicle stop position is more likely in normal conditions. Otherwise the diagrams are correct and illustrate a minimum, less conservative, scenario. In the scenario illustrated there does not appear to be any issue except that "Entry 1 Looking Left" is marginal and with any vegitative growth it will be inadequate. Adjust grading and landscape plan as applicable to improve this sight line near Sta. 12+00 on the associated profile.

Response: Site distance exhibits have been updated to the have the reference point be behind the pedestrian crossing. Also, Entry 1 grades have been revised to improve the "Entry 1 Looking Left" sight line.

Building Codes Review (Joe Frogge)

Water meter vault details not found in design.
 Action required: Provide domestic water meter vault details. (not provided by City - to be individually engineered)

Response: Water meter vault detail has been added in the Detail Sheets.

2. 2018 IPC 708.1 Cleanouts Required. Cleanouts shall be provided for drainage piping in accordance with Sections 708.1.1 through 708.1.11.

2018 IPC 708.1.3 Building drain and building sewer junction. The junction of the building drain and the building sewer shall be served by a cleanout that is located at the junction or within 10 feet of the developed length of piping upstream of the junction. For the requirements of this section, the removal of a water closet shall not be required to provide cleanout access.

2018 IPC 708.1.4 Changes of direction. Where a horizontal drainage pipe, a building drain or a building sewer has a change of horizontal direction greater than 45 degrees, a cleanout shall be installed at the change of direction.

Where more than one change of horizontal direction greater than 45 degrees occurs within 40 feet of developed length of piping, the cleanout installed for the first change of direction shall serve as the cleanout for all changes in direction within that 40 feet of developed length of piping.

Action required: Provide cleanouts to comply.

Response: Cleanouts have been added to all sanitary service bends. Refer to Sheets C701-C706. Cleanouts, or drain basins are also provided on any storm roof drain line bends that are greater than 45 degrees.