

August 21, 2018

Mr. Mike Weisenborn
Project Manager
City of Lee's Summit
220 SE Green St.
Lee's Summit, MO 64063

Re: **Summit Square Phase II**

Mr. Weisenborn,

Please see the following responses to the City of Lee's Summit's Applicant Letter dated Wednesday, June 25th, 2018.

Fire Review:

1. Comment: 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: Does the proposed hydrant model provide the required fire flows per IFC Table B 105.1?
Confirm available fire flows.

Engineer Response: See water impact statement previously submitted for fire flow analysis.

2. 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 2012 International Fire Code

Engineer Response: Acknowledged.

3. Comment: FC 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: Signs, painted curbs, or a combination of both shall be provided in front of the apartment buildings. Verified at inspection

Engineer Response: Acknowledged.

Engineering Review

1. Comment: Please refer to the applicant letter dated May 24, 2018. Comment #24 stated that the asphaltic concrete pavement section was not in compliance with the Unified Development Ordinance (UDO) Article 12 "Parking", in terms of chemically-stabilized subgrade or geogrid. We were provided with a geotechnical report that is not adequate to compare with our UDO standard design. The geotechnical report may be used, but it must show an equivalent design or greater. A simple statement in the report saying "...it is our opinion that the pavement design is adequate" is not sufficient justification for this alternative design. Please be aware that the previous approval (i.e., for the first phase of apartments) contained no such waiver or alternative design. The previous design utilized the standard design shown in the UDO. Finally, the detail shown for asphaltic concrete on Sheet C33 is not adequate for construction. There is no mention of the required 6 inch aggregate base, or the chemically-stabilized subgrade or geogrid. Even if the geotechnical report were approved, then referencing a report on the typical section is not appropriate. A contractor and/or inspector will not have access to such a report in the field, and specific details must be provided concerning the subgrade.

Engineer Response: Please see attached memo from Terracon. The proposed pavement section has been revised to match the sections used on Phase I which has performed well.

2. Comment: Please refer to the previous applicant letter dated May 24, 2018. Comment #26 was addressed but needs to follow the UDO in terms of the chemically-stabilized subgrade or geogrid, a minimum of one (1) foot beyond the back of curb, and the required 6 inch aggregate base.

Engineer Response: The detail has been revised to match the subgrade shown in the pavement sections extending one foot behind back of curb.

3. Comment: Please refer to the applicant letter dated May 24, 2018. Comment #27 requested that the location of all trench checks be shown. The response was "...trench check detail removed." We did not ask for the trench check detail to be removed. Trench checks are required on all sanitary sewer laterals, and their location should be shown on the plans.

Engineer Response: The trench check detail has been added back in the plans and trench check locations have been added to the sanitary plan.

4. Comment: Two inch meters are now called-out, but they are called-out incorrectly. They should use our standard design shown on WAT-11. This detail is for meters 2 inches and smaller. A valve is neither required or desired prior to the meter pit and meter. The valve is part of the meter assembly. The plans also indicate that the meters will be installed in vaults which is incorrect. They will be installed in meter wells provided by the City.

Engineer Response: The notes have been revised to reference meter pits and the valves have been removed upstream of the meters.

5. Comment: Please refer to the applicant letter dated May 24, 2018. We had requested the method to drain the backflow vault, and the response stated that the vault would be drained by a pipe. We did not see any details concerning the placement of this pipe.

Engineer Response: See details of the vault drain pipes on the utility plans.

6. Comment: In the previous applicant letter, we had requested the following items, but do not see them in the estimate: 1) backflow vaults and backflow assemblies, 2) commercial entrances, 3) sodding or seeding, fertilizer, mulch, 4) chemically-stabilized subgrade or geogrid, including the area one (1) foot beyond the back of curb, 5) cut-in tees, 6) valves, bends, and tees, 7) sanitary sewer manholes, 8) storm structures and inlets, 9) valve boxes and valve covers. Please be aware that the Engineering Plan Review and Inspection Fee does not include landscaping (i.e., bushes, shrubs, trees), meter pits, 6 inch and smaller storm lines, 24" LVC under buildings, pavement markings, or AB-3 beneath buildings. If included in the estimate, however, we will remove them prior to calculating the fee

Engineer Response: Please see attached revised estimate and notes added to the bottom of the estimate for reference to the above.

Please feel free to contact me if you have any additional questions.



RENAISSANCE INFRASTRUCTURE CONSULTING

Mick E. Slutter, PE
Project Manager, Vice President