CITY COMMENTS RESPONSE LETTER

April 29th, 2024

RE: Lee's Summit Flex Spaces

Final Development Plan

60 SE Thompson Dr

Lee's Summit, MO 64081

NW 1/4, SECTION S17, TOWNSHIP 47N, RANGE 31W

Dear Mr. Scott Ready,

Below are the responses to the city comments addressing the Lee's Summit Flex Spaces Final Development Plan submittal made on March 28th, 2024. These are being resubmitted with the request for a Preliminary Development Plan in order to fulfill the required administrative changes requested in the comment response. Application has been previously sent.

ENGINEERING REVIEW

- 1. Sheet C006: Please remove the gate valve by the vault. The valve across the street is all that is required. I apologize for the incorrect comment asking for it to be added. This change has been made. See Sheet C006.
- Sheet C008: Include the following note: "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.
 This change has been made. See Sheet C008.
- 3. Sheet C012: Please revise the standard duty asphalt pavement sections as follows:
 - a. UDO Section 8.620 Table 8-5 requires the use of granular base course with geogrid OR granular base course with 6" chemically treated subgrade. Please revise. Asphalt is no longer being used for this development. The project will utilize concrete mixes utilizing the KCMMB specifications. See Sheet C012.
 - b. Design and Construction Manual Section LS2205.4 now requires the use of KCMMB Asphalt Material Specification, current edition, rather than APWA designations. Please revise. Asphalt is no longer being used for



this development. The project will utilize KCMMB Concrete specifications. See Sheet C012.

- 4. Please add a sheet in the sheet in the plans labeled "Stormwater BMP" which shows a plan view of the detention basin and relocated Outlet Structure details. It should be together in the plan set with the ADS detail sheet. This change has been made. See Sheets C009A-C009C.
- 5. Stormwater Drainage Study:
 - a. Why is "Area of System" shown as 6500 in the green area and 5797 next to it? Please clarify. The cell shown as 6500 sf is automatically filled by ADS using the site-specific layout information. The information shown in blue, to the right of the 6500 sf cell, appears when we input the number of chambers and end caps. It is conveying that a fully stoned system would take at least that amount of area. The 6500 sf is what is used in the calculation and the area of the system, as designed, meets this 6500 sf value.
 - b. How does this table compare to the 60" chamber height shown on the next page. Please clarify. The table is generated from the 60" chamber and granular system geometry (30% voids). This is used to develop the stage storage curve used in the modeling.
 - c. What does the 24735.44 shown highlighted in gold signify? The highlighting represents the top of the storage basin including the granular above the chambers. The highlight is a standard output from the software utilized to produce the table. The maximum water surface elevation is just below this value and represents the height of the 100 year event over the emergency spillway weir in the outlet control structure, assuming no flow through the other openings.
 - d. Please provide a report from PondPack that shows the outlet structure information (multiple orifice and weir information) used in the modeling. If it is already in the submitted report, please indicate where it can be found. The rating curves and design information for the proposed composite outlet structure are in Appendix H: PondPack Modeling. It is in the first 5 pages of that section. Each orifice and weir was provided as well as a summary of the entire functionality of the control system.
- 6. O&M Manual: The submitted ADS information on the detention basin will need to be included as a part of the O&M Manual. It doesn't replace the manual required from the design engineer. An engineer-written O&M Manual has been included with this submittal, in addition to the ADS StormTech Underground Detention Chambers O&M Manual Guidelines.



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 International Fire Code. Additional fire protection or area separation may be required on the south building depending on use and occupancy classification. Acknowledged, building plans will be submitted separately.
- 2. IFC 903.3.7 Fire department connections. The location of fire department connections shall be approved by the fire code official. Connections shall be 4 inch Storz type fitting and located within 100 feet of a fire hydrant, or as approved by the code official. Show the location of the FDC on the north building. Location of the FDC on the north building is shown on Sheet C006. It has been called out according to this comment. Additional details are shown on sheet F500.
- 3. IFC 506.1 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 listed in accordance with the U; 1037, and shall contain keys to gain necessary access as required by the fire code official. 506.1.1 Locks. An approved lock shall be installed on gates or similar barriers when required by the fire code official. Provide a Knox key switch or pad lock on the gates to the facility. Provide a Knox box 6' AFF over the FDC on the north building. Knox key switches on gates are shown on Sheet C003, Knox Box 6' AFF over the FDC on north building shown on Sheet C006.



Please feel free to contact me with any questions or concerns regarding the responses to the city's comments.

Sincerely,

Patrick J. Joyce, P.E.

Sr. Project Manager, Kimley-Horn & Associates

