



February 22, 2024

Mr. Gene Williams
City of Lee's Summit
220 SE Green Street
Lee's Summit, MO 64063

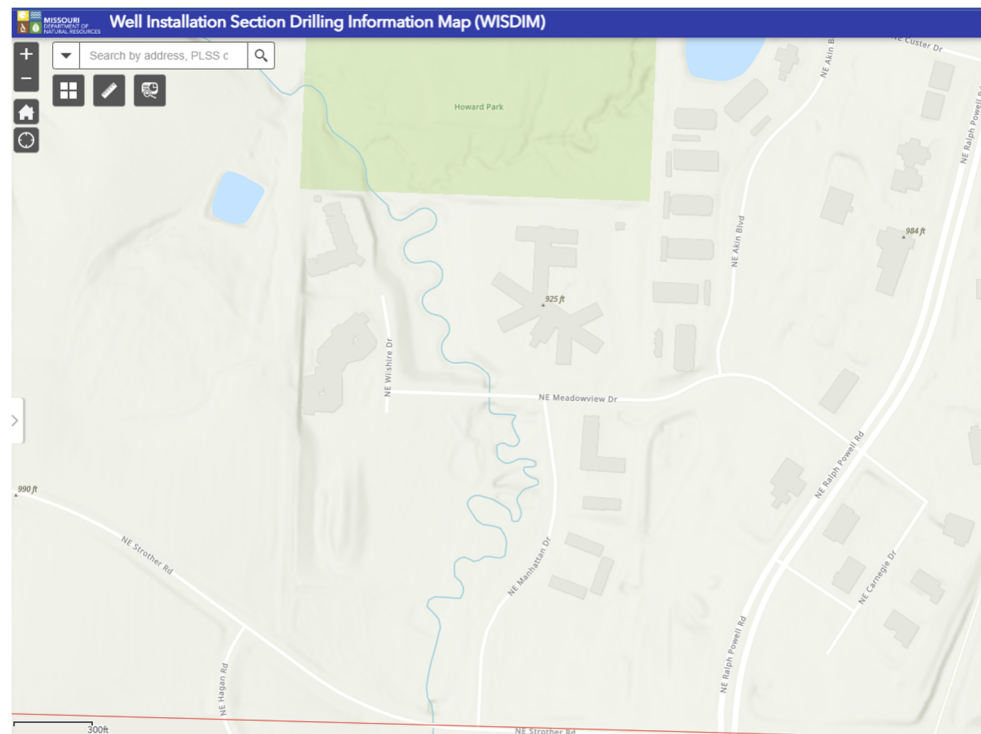
RE: Comment Response Letter
Wilshire Hills Phase III
NE Wilshire Drive
Lee's Summit, MO 64064

Dear Mr. Williams:

Please find enclosed the civil related comment responses for Wilshire Hills Phase III Construction Document review submittal. Comments were received on December 15, 2023. Below are responses to site plan review comments received.

Planning Review – Hector Soto Jr.

1. **PLATTING.** No building permit shall be issued until such time as the subject property is platted.
 - a. *Understood.*
2. **SITE DATA TABLE.** Include a site data table that includes the following information: Lot Size; Building Area (building footprint sq. ft. and total sq. ft.); Floor Area Ratio; Number of Dwelling Units and Number of Beds; Impervious Coverage; Number of Parking Spaces (required # and provided #). The UDO requires parking to be provided at a rate of 1 space for every 2 beds plus 1 space per employee on maximum shift. Please provide the parking calculation used to arrive at the number of required spaces. Staff can administratively approve the provision of parking at a different rate if empirical data can be provided to support that an alternate rate can satisfy demands of the facility.
 - a. *New table shown on page C0.01.*
3. **ACCESSIBLE ROUTE.** A general note is included on the accessibility plan (C7.01) indicating that certain slopes will not be exceeded, but no slopes are actually labeled on the plan. Label the slopes and cross-slopes of the site's accessible routes.
 - a. *Slopes have been added to the plans.*
4. **OIL & GAS WELLS.** Add a note to the plans regarding the presence of any active, inactive or abandoned oil and/or gas wells on the subject property. Cite the source of information used to make this determination. The Missouri Department of Natural Resources has a database of wells that can be used and cited as a resource.
 - a. Note has been added to page C0.02. The following image is proof that no wells are shown on the MDNR database of wells in the design area.



- b.
- 5. RETAINING WALLS.** The plans show a proposed retaining wall that crosses a proposed general utility easement along the south property line. The City's encroachment policy does not allow retaining walls to cross or encroach into a public easement. The plans also show an existing retaining wall that crosses a proposed general utility easement along the north property line. It does not appear from the utility plans that there is no public infrastructure along the north or south property line, so the proposed utility easements along said property lines do not appear to be necessary and therefore can be eliminated so as to avoid any conflict.

 - a. *The retaining wall has been moved 10 feet into the site to ensure all geotextile fabric is placed outside of the waterline easement. This also allows for easier constructability for the wall.*
 - b. *The utility easement along the North and South property line has been removed.*
- 6. PHOTOMETRIC PLAN.** No photometric plan is provided for review. Submit a photometric plan in accordance with UDO Section 8.230. All proposed exterior lighting shall comply with the requirements of UDO Sections 8.220, 8.250, 8.260, 8.270 and 8.280. Provide cut sheets for all exterior light fixtures for review to confirm compliance with the lighting requirements previously cited.

 - a. See architectural plans.
- 7. MECHANICAL SCREENING.** Indicate on the site plan or building elevations the location of all exterior ground-mounted and roof-mounted equipment as appropriate. Ground mounted equipment shall be totally screened from view by landscaping or masonry wall up to a height of the units to be screened. All roof-mounted equipment shall be screened entirely from view by using parapet walls at the same height as the mechanical units. Roof-mounted units shall be dashed-in on the building elevations to indicate their location. Please take into account the additional height from the curbs on which RTUs will be placed when providing the required parapet height for screening purposes.

 - a. *See landscape plans for all screening of ground mounted equipment.*

8. **LANDSCAPE PLAN.** Label the size of all proposed trees and shrubs at the time of planting. Medium and large shrubs shall be a minimum 2-gallon or 5-gallon container size, respectively. Deciduous trees shall be a minimum 3" caliper at the time of planting. Evergreen trees shall be a minimum 8' in height at the time of planting.
 - a. *Tree and shrub sizes are located on landscape plan page L1.01.*

LANDSCAPING NOTE

1. ALL PLANT MATERIAL SHALL BE:
 - a. FREE OF DISEASE AND INSECTS.
 - b. CONFORMING TO AMERICAN STANDARD FOR NURSERY STOCK OF THE AMERICAN ASSOCIATION OF NURSEYMEN.
 2. SPREAD TOPSOIL AMONG ALL LANDSCAPED AREAS. FOCUS ON PLANTING BEDS BEFORE DISTRIBUTING TO LAWN AREAS.
 3. PLANTING MATERIALS SHALL BE OF THE FOLLOWING MINIMUM SIZE
 - a. LARGE DECIDUOUS SHADE TREES (MATURE HEIGHT >45') = 3" DHB
 - b. MEDIUM DECIDUOUS SHADE TREES (MATURE HEIGHT 30'-45') = 3" DHB
 - c. SMALL DECIDUOUS SHADE TREES (MATURE HEIGHT 20'-30') = 2" DHB
 - d. ORNAMENTAL TREE (MATURE HEIGHT <20') = 2" DHB
 - e. EVERGREEN TREES: MINIMUM HEIGHT OF 8 FEET AT PLANTING.
 - f. MEDIUM SHRUBS = 18-24 INCH BALLED AND BURLAPPED OR 2-GAL CONTAINER
 - g. MEDIUM SHRUBS = 24-30 INCH BALLED AND BURLAPPED OR 5-GAL CONTAINER
 - h. GRASS, SEED, SOD = >80% PURE LIVE SEED, 99% WEED FREE
 8. LIVING LANDSCAPING SHALL BE USED TO COVER ALL OPEN GROUND SUPPLEMENTED WITH HARD WOOD MULCH.
 9. ALL TRANSFORMERS, A/C UNITS, AND OTHER VISIBLE UTILITIES TO BE SCREENED WITH PLANTS.
 10. LANDSCAPING SHALL BE PLANTED SUCH THAT THE MATURE SPREAD OF THE PLANT IS TO REMAIN 2' FROM THE BUILDING.
 11. OWNER/TENANT/AGENT SHALL BE JOINTLY RESPONSIBLE FOR THE MAINTENANCE IN GOOD CONDITION OF PLANT MATERIAL.
 - b.
9. **TRASH ENCLOSURE.** Provide a detail of the proposed trash enclosure. Each trash enclosure shall be constructed of masonry walls or steel architecturally designed walls with either a solid steel opaque gate painted to be compatible with the color of the masonry or steel walls and building it is to serve or a steel framed semi-opaque gate with a screen mesh material approved by the Director that provides an appropriate visual barrier.
 - a. *See architectural plans sheet AS-101.*

Engineering Review – Gene Williams P.E.

1. North commercial entrance crosses the extended property line to the north, which is not allowed without a shared access easement. Please terminate the point of curvature prior to the extended property line to the north in a similar fashion to what is shown on the southern commercial entrance. Please revise the plan as appropriate.
 - a. *The driveway has been adjusted to stay within property lines.*
2. Profile Views of All Storm Lines: Please identify each line as private by labeling each profile with the word "PRIVATE" on the profile view. This is used by our GIS group to identify public versus private improvements.
 - a. *Labels have been added to page C2.13 on the Public Improvements and page C5.01 on Phase III.*
3. Hydraulic grade lines for the design storm shall be shown on all pipes greater than 15 inches diameter. If the pipe cannot manage the 100-year event without surcharging, a suitable overflow route shall be established with the resultant 100 year HGL being a minimum of 2.0 feet below the lowest building opening. Please revise as appropriate.
 - a. *Hydraulic grade lines have been added to page C6.01.*
 - b. *A suitable overflow route has been established to convey water around the building in*

case of overflow. The northern portion of the site follows a swale through the back of the building before flowing to the east and Wilshire Drive. The Southern portion of the site has a designated overflow path along the southernmost side of the parking lot

4. **Sheet C6.01: In the southeast corner, it appears there is an easement dedicated for the private storm line. Please refer to previous comments related to the public street and storm line plans, as this line shall be considered private, not public. Please ensure this is carried-through on the plat.**

a. Plan has been revised to match current Public Improvement changes.

5. **Sheet C6.01: The water line domestic and irrigation service is not correct. The following issues were present in the proposed plans:**

1) a separate tap is needed to the public main for each water meter

a. Separate taps have been called out on page C6.01.

2) no valves are required on domestic water services unless the meter is greater than 2 inches, please eliminate from drawing (valves are internal to the meters 2 inches and less, hence no need to provide another valve)

b. Valves are shown on lines greater than 2 inches. The irrigation meter has been moved internal to the building.

3) sizing of the meter was not shown

c. Meter sizing has been added to plans.

4) materials were incorrect for the domestic water line, as it is required to be copper from the main to the meter, and copper from the meter to the building a minimum of 10 feet

d. Copper has not been specified for the domestic service line since the line is greater than 2 inches:

a. Section 3900 Water Mains: Service Lines from the Water Main to the Water Meter: Service lines 2 inches in diameter and smaller shall be made of Type K soft copper, complying with ASTM B 88. Service lines greater than 2 inches in diameter shall be DIP or PVC pipe and shall comply with Paragraphs 3901.C. or 3901.D, respectively, of the City of Lee's Summit Standard Specifications, subject to restrictions based on the City's currently-adopted Fire Code.

5) domestic service line material past the 10 foot point shall comply with the building code

e. Noted.

6) water meters should be shown within an easement

f. Water meters are located within the utility easement for the site.

7) backflow vault for domestic service shall be installed within the building, not outside.

Please see WAT-11 or WAT-13 for questions related to the domestic water connections.

Please revise.

g. See architectural plans for backflow vault.

6. **Sheet C6.01: If irrigation meter is desired, it shall be noted as to size, and the backflow method shall either be contained within the building and then fed to the irrigation system, or a separate system to be coordinated with building codes outside the building. As shown, there appears to be an outside backflow for the irrigation, but this will need to be coordinated with codes. Please evaluate and review, and revise as appropriate.**

a. Irrigation meter has been moved internal to the building.

7. **Sheet C6.01: The public sanitary sewer plans appear to show the location of the private lateral. As such, please add notes such as "connect to existing lateral" or equivalent language. Please revise.**
 - a. *Note has been added to plan on page C6.01.*
8. **A SWPPP is required due to the project disturbance being greater than 1 acre. Please provide a SWPPP for this project.**
 - a. *A SWPPP has been provided.*
9. **How will the backflow vault be drained? The sump should be drained to either: 1) daylight if possible, 2) a curb or field inlet, or 3) an infiltration trench. Please specify which method is used to drain the backflow vault, along with other details needed to such as the route, materials, etc. Please revise on the standard detail and the plan view at a minimum.**
 - a. *2" discharge pipe has been added daylighting into the existing storm sewer. See page C7.01.*
10. **Landscape Plan: Trees are shown either directly on top of the public water main, or too close to the public water main. The rule is as follows: Trees shall be located no less than 5.0 feet from any public water main, as measured from the outside of the pipe, to the outside of the mature tree trunk. Please evaluate, and revise as appropriate.**
 - a. *Tree location has been adjusted. See page L1.01.*
11. **A retaining wall is shown on the plan view, but there are no other details concerning this feature. Please provide a rendering of the retaining wall, along with a general overview of the retaining wall (i.e., is it a segmental retaining wall, concrete cantilevered retaining wall?), along with sufficient notes concerning the design, such as "segmental retaining wall to be designed by others, and final sealed drawings to be submitted to City of Lee's Summit, and independent inspectors to review and inspect its construction" or equivalent language. Please revise.**
 - a. *Retaining wall plans have been included.*
12. **Swales are proposed over the existing 30 inch water main along the west side of the project. This is a very important water main for the City of Lee's Summit. Have you potholed this line? Have you checked as-builts of this line? A minimum cover of 3.5 feet is required following any grading over the pipe. Please verify there are no conflicts.**
 - a. *Swales have been designed along the top of the wall but do not intersect with the waterline easement.*
 - b. *Comment for field check added to page C0.02.*
13. **Are there any tie-backs extending within the easement on the west side of the project? If so, these are not allowed. It is considered an unallowed encroachment into a utility easement by a structure. Please verify and revise as appropriate.**
 - a. *Retaining wall location has been adjusted by 10 feet to ensure all tie-backs are outside of the existing waterline easement.*
14. **Sheet C4.01: Why is the storm line along the southeast corner of the project not included in these plans? As discussed in earlier conversations, this line should be a private line, not a public line. Please review the public street and stormwater plans and ensure this is updated, and please update on these plans to ensure it is called-out as private, and please provide a profile view of this line. Please revise.**
 - a. *Plan has been updated to match current public infrastructure.*
15. **Concrete is called-out on the parking lot, but no jointing pattern was shown. Please provide a site-specific jointing pattern showing the location of any sawcuts, or any specific joints to be**

installed. It is assumed you are only providing sawcuts since it appears woven wire is being provided within the pavement?

a. Joint plan has been added.

16. Please show the slopes on the ADA-accessible offloading areas. Stalls are shown, but the offloading areas are missing.

a. Slopes have been added.

17. KCMMB concrete mix is required from the right of way line to the road. Although recommended for the interior parking lot, it is not required. Please show KCMMB concrete mix for the driveway as specified above in the form of a note.

a. Per the public improvement plans, the driveway entrances will be built with the construction of Wilshire Drive. This will ensure that the KCMMB concrete mix is used.

18. Sidewalk Detail: Sidewalk within right of way (i.e., public sidewalk) shall not have woven wire fabric installed. Please see City specific standard detail for sidewalk, which includes leveling course. Please revise.

a. Public sidewalk will be built with Public Improvement plan to be completed before site development. Plan has been updated to differentiate between public and private plans.

19. ADA-accessible ramps at the two (2) commercial entrances were missing from the plans. These ramps shall be sufficiently detailed, including elevation callouts, slope callouts, width, flat spot across the driveway, etc. Please be aware the City of Lee's Summit uses a design standard of no greater than 1.5% cross-slope for ramps and sidewalks, and 7.5% running slope for ADA-accessible ramps. This will allow for some level of construction tolerance. Please provide a site-specific (i.e., not a generic) ADA-accessible ramp and ADA-accessible route plan.

a. Plans have been revised to the design standard of 1.5% slope.

b. Entrance ramps to be built with public improvement plans.

20. It appears the City standard drawing for water service connection and meter was missing. Please include WAT-11 or WAT-13 (depends on size of meter) in the revised plans.

a. WAT-11 has been included in the plans.

21. There appear to be several references throughout the plan set specifying 1.7% slope for ADA-accessible turning spaces, cross-slope, ADA-accessible ramps, ADA-accessible drive spaces, etc. Please revise, as the City of Lee's Summit has different design standards of 1.5%. Final construction will be allowed to exceed this slope to 2.00% maximum, but we need the plans to show 1.5% design slope. In addition, the running slope of ADA-accessible ramps in the City of Lee's Summit is a maximum of 7.5%, with 8.33% being acceptable for the as-built condition. Please review the plans and revise as appropriate.

a. Plans have been revised to the design standard of 1.5% slope.

22. An itemized and sealed Engineer's Estimate of Probable Construction Costs should accompany your final submittal drawings. Please include all sitework in this estimate, but do not include the building, lighting, trees, bushes, fencing, or trash enclosures.

a. OPC has been included.

Traffic Review – Erin Ralovo

1. The sidewalk on the east side of the development will need to be extended past the plat all the way to the intersection of Wilshire and Meadowview to meet with the existing sidewalk.

a. Sidewalk has been adjusted on public improvement plans.

2. Curb return radii at the drive connections should be 35 FT or an explanation as to why that is not possible is needed.

a. Curb return radii have been adjusted to 35 FT.

Fire Review – Jim Eden

1. **Provide the correct address for the project.**
 - a. *Address has been adjusted.*
2. **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.**
 - a. *Note has been added. See page C0.02.*
3. **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.**
 - a. **Action required- Work with Water Utilities to determine there is adequate fire flow per IFC Table b105.1(2) with a 50% reduction allowed for a sprinkler system.**
 - b. *Confirmation from water utilities received January 9, 2024 confirming 2000 gpm fire flow would be adequate with the completion of the loop south of Strother Road.*
4. **Fire Department Access- Prior to any combustible construction, Wilshire Drive shall be completed through to Strother Road, all public and private hydrants shall be in place and operable , and the apartment parking lot's asphalt base shall be in place.**
 - a. *Note has been added. See page C0.02.*
5. **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. It is assumed the FDC will be located the same as Wilshire II, but it needs to be shown on the plans.**
 - a. *FDC has been shown on plans. See page C0.02 and C7.01.*

Building Codes Review – Joe Frogge Specify sizes of water meters. If larger than 2" provide complete custom pit construction details. (we only provide pits for 2" and smaller)

1. Size of water meters has been shown on plans.

All other comments have been modified and noted the updated changes on the Stormwater Hydraulic Report. If you have any questions or comments, please contact me.

Sincerely,



Sarah Thompson