Katy Bourke, P.E. Kimley-Horn & Associates 4525 Main Street, Suite 1000 Virginia Beach, VA 23462

RE: Warehouse at 5900 Lot J

5900 Richmond-Henrico Turnpike FILE NO. 5481; POD2022-00473

Dear Mr. Bourke:

We have reviewed the construction plans submitted to the Planning Department on September 15, 2022.

Please address the following comments and **resubmit revised construction plans** for review. Water and Sewer Agreements that must be executed by the Owner and the County for water and sewer improvements **have** been executed.

General

- 1. Amended Water and Sewer Agreements may be required. Submit an Information Sheet for the preparation of Utility Agreements. This will allow DPU to determine if the Water and Sewer Agreements need to be amended.
- 2. Be sure to provide an original signature on the engineer's seal on the cover sheet. All other sheets can have facsimile signatures.
- 3. Landscaping and lighting cannot be approved until final utility layout has been approved by DPU.

Sheet CU101:

- 4. Reference all water main fittings and appurtenances (tees, crosses, valves, bends, etc.) on the water main. See all utility sheets as well.
- 5. Remove the bend before the proposed water meter. If the water service line needs to deflect, place the bend after the water meter.
- 6. Provide a blowup of the water meter and fire hydrant connections so the utilities can be clearly seen on the plan sheet.
- 7. Reference the size of the existing plug to be removed for the proposed water main connection.
- 8. Label the size and material of the domestic and fire service line before the water meter and boundary valve.
- 9. A domestic backflow preventer is required for the proposed project.
- 10. Provide a reference for the irrigation backflow preventer.
- 11. Backflow preventers are private items. Shift the backflow preventer out of the utility easement.
- 12. Show and reference the proposed boundary valve on the fire service line.
- 13. Reference the size, detail number, and sheet location of the backflow preventer in the backflow preventer references.
- 14. Label the irrigation meter connection as well as the size and material of the service line to the irrigation meter.
- 15. DPU recommends installing valves every 1000' on the private fire and domestic water lines to minimum size service disruptions.
- 16. Why are two water meters shown on the plan? A 1" water meter is referenced on the plan sheet. Revise the drafting error of the water meter.
- 17. A reference specifying "end of City maintenance" has been provide near the force main connection. However, this project falls within the County and not the city. Also, the end of the County

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maintenance is at edge of the utility easement on Warehouse at 5901 Richmond Henrico Turnpike parcel. Remove the reference from the utility plan sheet.

- 18. A reference has been provided to see Note 2 for the 10" DCDA. No notes have been provided on the utility plan sheets. Update the utility references accordingly.
- 19. The siamese connections must be installed within 50' of the dedicated fire hydrants.
- 20. Fire hydrants are required every 500' in accordance with DPU Standards.
- 21. A monitoring manhole is required for this project.
- 22. Provide a note to see plans titled, "Richmond Henrico Turnpike Improvements, by Kimley Horn & Associated, Dwg File No. 2021-079" for information concerning existing utilities.

Sheet CU102:

23. There are several fire hydrants in the path of tractor trailer parking. To avoid damages to the proposed fire hydrants, provide bollards around the fire hydrants.

Sheet CU500:

- 24. Revise Material Quantities in accordance with plan comments.
- 25. A dual 1-1/2" & 2" meter is not being installed with this project. Remove D-540 from the utility plan sheet and provide the appropriate meter detail on the construction plans.

Sheet CU501:

- 26. A force main saxophone detail has been provided on the plans. This detail is only needed for the force main connection to the public sanitary sewer main. Remove the detail from the plan sheet.
- 27. Based on a Combined Fixture value total of 497.8, a 2" water meter is required for this project.

Sheet CG101:

28. Show the sanitary sewer pipe location on the grading plan. The proposed grading will impact repairs and maintenance of the sanitary sewer pipe. What is being provided to prevent a slope failure? DPU recommends shift the limits of the grading a minimum of 15' from the sanitary sewer pipe.

If you have any questions concerning the above noted comments or the plans, please contact me at 501-4508.

Sincerely,

MY

Alice Thompson Utilities Engineer

cc: Jason Kushner, Hillwood Investment Properties
Dennis Bickmeier, Richmond International Raceway

bc: Ralph Claytor
Marchelle Sossong
Daniel Ivy
Spencer Norman, Planning

ANT/vr