Carter B. Baum, P.E. Kimley-Horn 1700 Willow Lawn Drive, Suite 200 Richmond, Virginia 23230

> RE: Green Clean at Lowes Plaza 9486 W Broad Street File No. 5545; POD2021-00462

Dear Mr. Baum:

We have reviewed the construction plans submitted to the Planning Department on November 1, 2021 and received by DPU on November 5, 3021.

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 not** been executed.

General:

- 1. Owner to submit executed green card prior to final utility plan approval by DPU.
- 2. The DPU Monitoring and Compliance division is currently reviewing the NOI form information. Any comments requiring further action will be forwarded to you upon receipt by our office.

CA-100 (Cover Sheet):

- 3. Coordinate square footage of the building, under site data, with that shown in the ISO fire flow estimate form.
- 4. Original signature is required on the P.E. Seal on the Cover Sheet. A facsimile of seal, signature and date is acceptable on all other sheets.

CV-102 (Demolition Plan):

- 5. Based on the maximum demand of 97 GPM in the meter sizing form, a 2" meter will be required instead of 1 ½" meter. The existing 1.5" service line cannot be reused and will need to be abandoned as a new 2" water service will be required for the new 2" meter.
- 6. Add the following notes on the plans in relation to existing water service abandonment:
 - Connections will be abandoned at the main in accordance with DPU standards 1.4.01C and 10.3.10
 - Contractor shall notify DPU inspector of abandonment schedule so that work can be verified.
 - Meter will be removed by DPU staff
 - Account will be finalized, and billing will stop only after proper abandonment of the services has been verified by DPU.
- 7. Label the meter number for the existing domestic water meter and exclusion meter that will be abandoned. Also, label the size of the exclusion meter.
- 8. Show and label the private sewer lateral upstream of the existing monitoring manhole. Abandon this lateral at the manhole per DPU standards D-170 since it will not be used to serve the proposed site. Add a note stating that "sanitary sewer lateral is to be abandoned consistent with DPU Spec. 1.4.01C and 10.3.10".

Carter B. Baum, P.E. November 18, 2021 Page 2

CU 101 (Utility Plan):

- 9. Provide 6" minimum core hole separation between the proposed lateral and existing lateral that will be abandoned at the existing monitoring manhole. Otherwise, manhole will need to be replaced.
- 10. Clearly show the invert (out) information for the existing monitoring manhole and design the invert in for proposed sewer to be at least 0.1' above the invert out.
- 11. Provide/ confirm that at least a 2.5% slope is provided in parking lot grade away from both the entrance and exit of the wash bay for at least 20 feet.
- 12. Provide an overhang of at least 18" (either structural or canopy) over the entrance and exit.
- 13. Provide additional utility easement across property frontage within Broad Street for existing 16" waterline so that there is at least 10 feet of easement/ R.O.W buffer from the main towards the property.
- 14. Label the size and material of the existing water main within Broad Street as 16" DI and the existing watermain onsite as 8" PVC.
- 15. Provide a 2" corporation stop and 2" copper service line from the main to the meter box for the proposed 2" meter Per DPU standards D-534. The exception to this will be where service lines exceed 25 feet and must be designed in accordance with detail D-530 and D-535. Please reference this detail D-534 in the plan view where applicable and include in the plans as well.
- 16. Provide an 8'x8' utility easement for the proposed water meter outside the R.O.W.
- 17. Label the size of the proposed domestic backflow preventer and show the location of this RPZ inside the building.
- 18. Specify reduced pressure backflow preventer for the domestic meter and reference DPU detail D-405. Include this detail on the plan.
- 19. Revise water material quantities in accordance with all comments and per the following:
 - Include the domestic backflow preventer.
- 20. Show water and sewer services that will be abandoned in place on the utility sheet.
- 21. Reference county water book in the bottom right corner of the utility plan.
- 22. Provide the peak irrigation demand.
- 23. Provide Monitoring manhole GIS ID number.
- 24. There appears to be a grade cut proposed over the existing 8" PVC waterline. Provide a profile showing the change in depth of cover over the waterline. Waterline will need to be lowered where necessary to maintain 3.5' minimum cover depth.
- 25. Add the following note, "Connections to existing manholes without stubs or bricked-up openings shall be the equal of either Kor-N-Seal w/stainless steel expander ring or Press-Seal w/nylon expander sleeve installed by core drilling manhole and in strict accordance with manufacturer's specifications."
- 26. Revise direction of flow for the sanitary sewer down stream of manhole 328SW028 to point to the west not the east.
- 27. Provide internal angle of the proposed lateral at the monitoring manhole.

CU 502 (Utility Details):

28. Based on the maximum demand of 97 GPM in the meter sizing form, a 2" meter will be required instead of 1½" meter.

Carter B. Baum, P.E. November 18, 2021 Page 3

If you have any questions concerning the above noted comments or the plans, please contact me at 501-4512 or John Clark at 501-4501.

Sincerely,

9reini botros Ireini Botros Utility Engineer

cc: Craig Van Bremen, Green Clean Holdings, LLC

bc: R. Claytor, M. Sossong

J. Clark

D. Ivy, M. Gallagher Aimee Crady, Planner

INB/vr