Monte Lewis, P.E. E. D. Lewis & Associates 2116 Spencer Road Richmond, VA 23230

RE: Libbie Mill Harp's Landing Office building

Libbie Lake West St

File No: 4902; POD: 2018-00378

Dear Mr. Lewis:

We have reviewed the construction plans submitted to the Planning Department on September 7, 2018.

The proposed Libbie Harp's Landing Office Building exceeds the number of ERU required to initiate construction of the offsite water line improvements in Staples Mill Rd in accordance with our letter dated March 21, 2008. These improvements are required to maintain acceptable pressures in the area and to provide necessary redundancy for the high population density created. The Staples Mill Centre Water Analysis dated March 21, 2008 indicated that the installation of a pressure reducing valve in Staples Mill Road and an increase in water main size (8" to 12") along Staples Mill Road are needed for the ultimate development for the Staples Mill Centre site. The Libbie Mill Offsite Waterline construction plans were approved on September 26, 2016. Plans for the offsite water improvements along Staples Mill Road will need to be awarded for construction prior to the approval of the Libbie Mill Harp Landing POD construction plans. The offsite water line improvements must be accepted for service before Tentative Acceptance of the on-site improvements for Harp's Landing.

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 for this project.

Cover Sheet:

1. Provide an original signature and date on the profession engineer's seal on the cover sheet.

Sheets D7:

2. The fixture value for the Washing Machine-3/4" Connection is incorrect. Revise the Fixture Value for the washing machine and update the Combined Fixture Value Total.

- 3. A Combined Fixture Value Total of 1907 requires a dual 1-½ water meter so why is a dual 2" meter being installed for the Office Floor 2-6.
- 4. By combining the Total Combined Fixture Value for the 1st Floor Retail/Rest and Office (2-6 Floor), a dual 2" meter would be sufficient to serve the whole building.
- 5. The Class of Construction Coefficient for a C-1 building type is 1.5.
- 6. The Occupancy Factor for a Retail/Restaurant/Office is 1 for a Class 3 Combustible building. Update the Fire Flow Estimate Form accordingly.
- 7. Based on the information provided on the Fire Flow Estimate Form, four hydrants will be required for this project. Review the information on the form and revise as necessary.

Sheets D8:

8. Provide a monitoring manhole detail on the construction plans.

Sheets UTIL-1:

- 9. Provide four N/E points on the plan.
- 10. Provide a reference to see plans titled "Libbie Mill Phase 2 of 1A, by ED Lewis & Associates, Dwg. File No. 2014-062" for information concerning existing utilities.
- 11. Ensure the monitoring manhole will be flushed to the proposed sidewalk.
- 12. Label the size of the Fire RPZ backflow preventer.
- 13. Provide a blow-up of the water meter design.

General:

14. Include the Staples Mill Centre Water Analysis letter dated March 21, 2018 on the construction plans.

If you have any questions concerning the above noted comments or the plans, please contact me at 501-4508 or Mikala Weston at 501-7543.

Sincerely,

Alice Thompson Utilities Engineer

cc: Shane Finnegan, Midtown Land Partners LLC, Suite 100

bc: R. Claytor

DPW

C. Duverne, M. Gallagher

A. Crady, Planning

ANT/tt