William R. Knoop, L.S. Goodfellow, Jalbert, Beard & Assoc., Inc. 7104 Mechanicsville Tpk. Mechanicsville, VA 23111

> RE: Hammer Medical 5606 Staples Mill Road File No. 5407; POD2019-00073

Dear Mr. Knoop:

The Department of Public Utilities has completed a review of the water and sewer plans that are part of the plan of development submitted to the Planning Department on February 19, 2019.

DPU recommends approval of these plans by the Planning Commission.

Please address the following comments before submitting the construction plans for signature.

Cover Sheet:

- 1. Provide original signature and date on the engineer's seal located on the cover sheet.
- 2. Change the title on the cover sheet to "Hammer Medical Office & Residents POD and Utility Plan".

Sheet C-12:

- 3. Either change the title of this plan sheet to "Layout and Utility Plan" and show all the proposed utilities on this sheet or provide a separate utility plan sheet for the proposed utilities to be installed with this construction plan.
- 4. As mentioned in the rezoning comments, the 12" water main in Staples Mill Road will need to be extended for both domestic service and fire protection.
- 5. The current location of the domestic water meter is in the right-of-way in front of the adjacent parcel at 5608 Staples Mill Rd and will need to be relocated in the front of this property.
- 6. Show all existing utility easements and provide the DB & PG numbers for the easements on the plan.
- 7. Provide four (4) northing/easting points on the plan.
- 8. Show the location of the existing water meter on the plan.
- 9. Reference the meter number and size of the existing water meter that serves the ex. building.
- 10. Is there an existing domestic backflow preventer inside the proposed building? If not, a backflow preventer is required for the proposed medical building.
- 11. Show the location of all existing sewer mains that is located within the property lines.
- 12. Does the sewer lateral extend the existing building? If so, show the service line to the building.
- 13. Label the size and material of the existing sewer mains/laterals shown on the plan.
- 14. A monitoring manhole is required for the proposed medical building.

- 15. Reference the CSB station, rim, and invert information for the existing manholes.
- 16. Reference the CSB/CWB Sheets in the bottom right corner of the plan sheet.

General:

- 17. Agreements have not been executed at this time. Agreements must be executed prior to the authorization to begin utility construction or approval of building permits. An Information Sheet for the Preparation of Utility Agreements has not been submitted for review. If the Information Sheet is incomplete when submitted, we will send you comments for correction and resubmittal. If the required Information Sheet complete when submitted, an Agreement will be forwarded to the Owner for signature within 21 days.
- 18. Provide the Material Quantities, Water & Sewer Notes (F-11), and Material Notes (F-6) on the plans.
- 19. Include the following details on the plans: Valve Box-Screw Type Adjustable (D-475), Typical Fire Hydrant Detail (D-495), Standard Meter Box For 5/8" and 1" Meters (D-525), Water Service Installation Detail for 5/8" and 1" Meters (D-520), Thrust Blocking Details (D-700), Ductile Iron Pipe Trench Bedding (D-730), and Electronic Marker Placement Detail For Water Mains and Sewer Force Mains (D-740).
- 20. Provide a Local Review form for the proposed 12" waterline extension.
- 21. Review the following comments pertaining to the Fire Flow Estimate Form.
 - a. Provide the Fire Flow Estimate Form on the construction plans.
 - b. Based on Real Estate information, the existing building is three stories. Update the subsequent calculations on the Fire Flow Estimate Form.
 - c. Add "C-2" to the Type of Occupancy on the form.
 - d. X_1+P_1 value should be 0.0392 with the church building facing this building (distance 21-30 ft, length 80-100 ft) and total Exposure and Communication factor at 1.0392.
 - e. A Required Fire Flow of 1500 gpm requires two fire hydrants.

Landscape & Lighting Plan:

22. Landscaping and lighting plans cannot be approved until final utility layout has been approved.

If you have any questions concerning the above noted comments or the plans, please contact me at 501-4508 or John Yi at 501-4511.

Sincerely,

Alice Thompson Utilities Engineer

cc: Marisse T. Hammer

bc: Ralph Claytor

Carmel Duverne, M. Gallagher

C. Goggin, Planning

ANT/tt