

March 19, 2014

Nancy Rodrique, LA  
Vanesse Hangen Brustlin, Inc.  
Two Columbus Center, 4500 Main Street, Suite 400  
Virginia Beach, VA 23462

**RE: Short Pump Park Pump Road and Three Chopt Road  
3425 Pump Rd  
File No. County; POD No. 2013-00180**

Dear Ms. Rodrique:

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 March 4, 2014.

DPU recommends approval of these plans by the Board of Supervisors.

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

**Cover Sheet:**

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

**Sheet C2.00-C2.07:**

2. Label the size and material type of all existing water and sewer mains shown on the plan. See all utility sheets and the existing conditions plan sheets.
3. Show all existing utility easements on the plan and provide the deed book and page number of the existing utility easements on the plan. See all utility sheets and the existing conditions plan sheets.
4. Reference the CSB/CWB sheets in the bottom right corner of the plan sheet. See all utility sheets and the existing conditions plan sheets.
5. Are there any existing wells onsite? If so, the wells will need to be abandoned in accordance VDH requirements.
6. Show the location of the existing water main and the existing fire hydrants and valves connecting to the existing water main. See all utility sheets and the existing conditions plan sheets.
7. Provide a note to see plans titled, "Pouncey Tract Water main, DPU# 2008-219, by Draper Aden Associates" for information concerning the existing 30" water pipe along Pump Rd.
8. Provide the CSB station, rim, and invert information for all existing manholes shown on the plan. See all utility sheets and the existing conditions plan sheets.
9. Provide the direction of flow arrows on the existing sewer mains. See all utility sheets and the existing conditions plan sheets.
10. Clearly indicate the existing 4" sewer drainfield and 2000 gallon septic tank to be abandoned will be abandoned in accordance with VDH requirements.
11. Provide a note to ensure valves will be flushed to grade, all existing utilities will be protected and existing utilities will maintain minimum cover at all times during construction.

12. Provide a note indicating all existing utilities to be abandoned shall be abandoned in accordance with DPU Standards 1.1.04C and 9.3.10.

**Sheet C5.01:**

13. Provide the following no lead note on the cover sheet, *“All water service accessories and fittings shall be lead-free in compliance with Section 1417 of the Safe Drinking Water Act, and NSF 61 approved.”*
14. The scale is incorrect on the plan. The plan appears to be a 20 scale instead of a 25 scale.
15. Provide four northing/easting points on the plan.
16. Change the solid line style to dash line style for all existing water mains shown on the plan.
17. The location of the fire hydrant and meter located west of the school does not match DPU records. Has the location of the utilities been field verified?
18. Portion of the public water and sewer main on the school site is not within a utility easement. Provide a utility easement around the public water main and sewer main on the school's property. The easement must be recorded with this project.
19. Reference the road name on the utility plans.
20. Per the County Sewer Book Sheet, a stub is located at MH (STA: 92+59.31). If the stub will not be utilized with this project, then the stub will need to be abandoned in accordance with DPU Standards.
21. The fire hydrant and valves located north of STR: A-1 does not connect to the existing water main. Review and revise as necessary.
22. The fire hydrant located north of STR: A-1 is not accessible. Relocate the fire hydrant and ensure the fire hydrant is no more than 7' from the back of curb.
23. There appears to be a clearance conflict with the STR: A-1 and the 30" water main. What is the vertical clearance between the two utilities?
24. Show the location of waterline adjustments in the water main by providing a bubble or circle around the adjustment area on the utility plan. Be sure to reference the sheet location of the waterline adjustment detail in the waterline adjustment callouts.
25. Label the distance from the existing water main to either the proposed face of curb or back of curb on the utility plan.
26. Relocate STR: A-1 approximately 10' away from the 30" water main.
27. Will there be any plumbing improvements in the Concession and Restroom Building (such as additional fixtures are added)? If so, meter calculations will need to be submitted to determine if a meter upgrade is required for the Concession and Restroom Building.
28. Be advised, additional fire hydrants may be required to protect the proposed Large Shelter/Restroom Building. The need for additional fire hydrants and hydrant location will be determined after ISO calculations have been provided and reviewed.
29. Why is S-13 labeled as a proposed cleanout? Per DPU records, there is an existing manhole in the location of S-13. The public manhole cannot be replaced with a cleanout.
30. Provide an internal angle at the manhole connections. See all utility sheets.
31. Provide the direction of flow arrows on the proposed sewer main/lines.
32. The proposed sewer laterals should connect to the existing manhole at 90° to the downstream sewer main. Modify the angle at the proposed manhole connections. See all utility sheets.
33. Indicate the slope on the proposed sanitary sewer laterals.

**Sheet C5.03:**

34. Provide a cross section of the water main in the proposed road entrance to ensure the existing water main has adequate cover.
35. Relocate the storm sewer between STR: B-10 and STR: B-11 approximately 10' from the 30" water main.

36. Reference a 30" x 8" tapping sleeve & valve for the proposed 8" water main connection. Be sure to show the valve that is part of the tapping sleeve & valve assembly.
37. Relocate the water main in the proposed road entrance. DPU does not allow cross county waterlines.
38. Change the material type of the fire hydrant lead from "PVC" to "DI."
39. Show the valve on the fire hydrant lead.
40. Callout the size of the water meter connection to the 8" water main.
41. The service line prior to the water meter should not deflect. If the water service line needs to deflect, it should deflect after the domestic meter.
42. Remove the 90° bend placed at the end of the water main and install an 8" x 6" tee to connect the fire hydrant to the water main. Place an 8" valve and plug after the tee to terminate the water main.
43. Indicate the size of the proposed meter and backflow preventer.
44. Reference the detail number of the backflow preventer and sheet location of the backflow preventer detail in the backflow preventer callout.
45. Why is there a vault being installed between the meter connection and fire hydrant?
46. Why is a valve being placed at the end of the 2" service line near the dog area?
47. Indicate the size and material type of the service line prior to the water meter.
48. Change the dashed line style to solid line style for all proposed sewer mains shown on the plan.

**Sheet C5.05:**

49. The proposed storm structure B-17 cannot be placed over the 30" water main. Relocate the storm structure 10' from the water main.
50. Provide the following core drill note on the plan: *"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."*
51. The existing fire hydrant located near MH: S-7 is not shown on the utility plans and appears to conflict with the proposed sidewalk location. The existing fire hydrant may need to be relocated.
52. MH: S-7 cannot be installed in the sidewalk. Relocate the manhole to avoid a trip hazard.
53. The existing manhole that was paved over in Pump Rd will need to be adjusted and flushed to proposed grade.
54. Provide .10 fall across proposed manholes and manhole connections.
55. Since the sewer will be installed overtop of the existing water main, change the material type of the sewer pipe between S-7 and S-6 from "PVC" to "DI"

**General:**

56. Provide a Review Checklist for the project. Be sure to include the discharge from the Concession Building in the calculations.
57. A Fire Flow Estimate Form and Domestic Meter Sizing Form is required for the Large Shelter Restroom building.
58. If an exclusion meter and sprinkler system is not being installed for this project, then remove F-16 and F-15 from the construction plans.
59. Since sewer service is being provided for the 2-story Concession Stand and Restroom building, a monitoring manhole may be required for this project. Submit a NOI to DPU for review.
60. Landscaping cannot be approved until final utility layout has been approved.
61. Agreements are not required for this County project.

Nancy Rodrique, LA

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Short Pump Park

If you have any questions concerning the above noted comments or the plans, please contact me at 501- 4508 or Tanneh Togba-Lee at 501-4512.

Sincerely,

A handwritten signature in black ink, appearing to read 'ANT'.

Alice Thompson  
Utilities Engineer

cc: Steve Hart, County of Henrico Division of Recreation and Parks

bc: R. Claytor

Amy Seal

G. Garrison, Planning

ANT/mab