Charles A. Kilpatrick COMMISSIONER DEPARTMENT OF TRANSPORTATION 523 N. WASHINGTON HIGHWAY ASHLAND, VA 23005 Virginiadot.Org

April 3, 2014

Kevin Wilhite and Christina Goggin County of Henrico P.O. Box 90775 Henrico, VA 23273

Re: Greengate Phase 1

Mr. Wilhite and Ms. Goggin:

We have reviewed the plan for the above referenced project and have the following comments:

- 1. Please add VDOT General Notes to the plans.
- 2. Please provide cross sections for every 25' for the turn lanes.
- 3. Please provide the VDOT WP-2 detail on the plans.
- 4. Please provide VDOT MH-1 detail on the plans.
- 5. It appears the proposed directional median does not meet the minimum 660 feet spacing requirement towards the proposed signalized intersection. Therefore, an access management waiver will be required.
- 6. Please provide the line of sight profile along the proposed grade for the western entrance and for the right turn lane at the main entrance. Additionally, please provide sight distance easements for the sections of the line of sight that leaves the right of way. The easement should run parallel and be a minimum of 2' behind the actual line sight. Nothing higher than 1' will be allowed in the easement.
- 7. Mill and overlay must extend to the full width of the adjacent travel lane when widening the roadway. Please extend limits on the plans. Additionally, near the east end of the project where the pavement ties into the existing right turn lane, please mill and overlay full lane and adjacent travel lane.
- 8. The side walk cannot weave in and out of the right of way. Please relocate the side walk between stations 11+00 and 12+00 outside of the right of way.
- 9. Please provide VDOT CG-3 and CG-7 detail. Additionally, please note where the VDOT curb and gutter transitions to Henrico standard curb and gutter. The transition must be outside of the right of way.
- 10. Please show all CD-1s, CD-2s, and UD-4 at all locations.
- 11. The minimum velocity for a storm drain is 3 feet per second and the maximum is 10 feet per second. It appears multiple structures have exceeded 10 fps/failed to meet 3 fps. Please adjust structures to meet standards.
- 12. Please provide spot shots at curb returns to ensure positive drainage. Additionally, please note gutters must maintain a slope at 0.5%.

- 13. Steps, VDOT ST-1, must be provide for structures that exceed 4' of depth. Please provide detail on the plans.
- 14. It appears the spread for Structure R10 will cover the whole width of the travel lane. Please make adjustments so that the spread is no more than ½ width of travel lane plus gutter.
- 15. Please show the HGL analysis for the offsite drainage calculations on VDOT standard form LD-347.
- 16. Please provide maintenance of traffic plan.
- 17. Please provide the pavement design for the proposed pavement. Additionally, please note pavement must match the existing.
- 18. It appears VDOT will maintain the pond area near the western entrance. Therefore, there will need to be an access shown on the plan to allow for maintenance.
- 19. The guardrail must be within VDOT right of way. Please make adjustments and provide the detail for the guardrail end terminal.
- 20. VDOT CG-7 requires 10 feet of clear zone from the edge pavement/curb. It appears the proposed right of way does not have sufficient space for the clear zone. Please show that the proposed right of way will allow for 10 feet from the edge of pavement.
- 21. Please note that with right of way adjustments the sidewalk must remain completely in or completely out the right of way. Additionally, stairs will not be allowed in VDOT right of way as the only means of access. There must an ADA access (ramp) in addition to the stairs constructed to VDOT standards.

We should continue to receive any revised drawings for the above referenced plans even after County approval as some of the changes may affect the right of way and any issued permits. If you have any questions, please call me at (804) 752-4768.

Sincerely,

James Ellis

Land Development Engineer

Robert Butler P.E.

Northern Area Land Use Engineer