## **CULPEPER ENGINEERING, P.C.**

P.O. BOX 733 LOCUST GROVE, VIRGINIA 22508 PHONE 540 423-9706 FAX 540 423-1534

March 19, 2025

Debonair LLC. 27388 Mine Run Road Rhoadesville, Virginia 22542

Re: Preliminary Site Evaluation
Mount Pleasant Estates
6 Lot Subdivision
Spotsylvania County, Virginia

Dear Sir,

At your request we have completed the Preliminary Site Evaluation for the referenced properties. The purpose of this evaluation was to review the soils, topography and drainage characteristics of the lots and mark an approximate drainfield area on a lot sketch. The primary emphasis of this evaluation was the determination of the suitability of these characteristics with respect to installation of any on-site waste disposal system in accordance with the current Commonwealth of Virginia/State Board of Health Sewage Handling and Disposal Regulations 2012, The Alternative Onsite Regulations 2011 and current Health Department GMP's.

Attached is a copy of the survey plat by James Luther, P. C. and a sketch on which we have marked potential Drainfield sites. Listed below is a brief summary of each potential lot evaluated and our opinion regarding Drainfield installation:

- 1. Lot No. 1 TM 73-A-15 (45.189 Ac.) We have marked an area on the attached sketch that in our opinion would support a Conventional Main and Reserve Drainfield for a 4 Bedroom House. The House could be situated to allow for gravity flow to the Drainfield Area. The soils encountered have an estimated percolation rate of 50 mpi and would be installed at approximately 42 inches.
- 2. Lot No. 2 TM 73-A-15A (50.000 Ac.) We have marked an area on the attached sketch that in our opinion would support a Conventional Main & Reserve Drainfield for a 4 Bedroom House. The House could be situated to allow for gravity flow to the Drainfield Area. The soils encounetered have an estimated percolation rate of 50 mpi and would be installed at approximately 42 inches.

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- 3. Lot No. 3 TM 73-A-15B (15.122 Ac.) We have marked an area on the attached sketch that in our opinion would support an Alternative Secondary Reduced Footprint System for a 4 Bedroom House. The soils encountered have an estimated percolation rate of 50 mpi and would be installed at approximately 36 inches. This area would require a pump from any House site to the Drainfield area. Please note a 100 ft. Scenic Buffer along State Rt. 614 (Duerson Lane) requires that no vegetation and contours be disturbed or altered per County requirements. Also no vegetation within 100 ft. of the wetland area shall be disturbed in accordance with Chapter 6A of the Spotsylvania Code.
- 4. Lot No. 4 TM 73-A-15C (15.684 Ac.) We have marked an area on the attached sketch that in our opinion would support a Conventional Main and Reserve Drainfield for a 4 Bedroom House. The House can be situated to allow for for gravity flow to the Drainfield area. The soils encountered have an estimated percolation rate of 50 mpi and would be installed at approximately 36 inches. Please note a 100 ft. Scenic Buffer along State Rt. 738 (Partlow Road) requires that no vegetation and contours be disturbed or altered per County requirements. Also no vegetation within 100 ft. of the wetland area shall be disturbed in accordance with Chapter 6A of the Spotsylvania Code.
- 5. Lot No. 5 TM 73-A-15D (18.000 Ac.) We have marked an area on the attached sketch that in our opinion would support a Conventional Main and Reserve Drainfield for a 4 Bedroom House. The House could be situated to allow for gravity flow to the Drainfield Area. The soils encountered have an estimated percolation rate of 50 mpi and would be installed at approximately 42 inches.
- 6. Lot No. 6 TM 73-A-15E (30.445 Ac.) We have marked an area on the attached sketch that in our opinion would support a Conventional Main and Reserve Drainfield for a 4 Bedroom House. The House could be situated to allow for gravity flow to the Drainfield Area. The soils encountered have an estimated percolation rate of 50 mpi and would be installed at approximately 48 inches.

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Please note this is a preliminary evaluation and would require additional information (backhoe pits, additional holes/pits, final design, etc.) prior to starting any permitting process. Small areas may exist for Drainfield Systems throughout the property if a detailed study utilizing backhoe pits was done. We have also included a copy of the plat obtained from client.

The conclusions and recommendations expressed in this report are based on field investigation, property boundary information, and County topographic maps. We appreciate the opportunity to be of service. If you have any questions do not hesitate to call.

Sincerely

S.E. No. 1940001016