

March 31, 2025

Building and Zoning Division 1 Benjamin Franklin Way Franklin, Ohio 45005

RE: Shaker Meadows Engineering Feasibility – Preliminary Development Plan – Franklin, OH

Dear Planning Commission:

On behalf of Henderson Development, CESO, Inc., is pleased to submit this engineering feasibility statement to accompany the Preliminary Development Plan application for the Shaker Meadows Development. This project is located on Shaker Road, Franklin, OH 45005. The subject parcels (PID: 0836351005 and 0835102001) are presently owned HDC, III, LLC.

## **Stormwater Management**

The existing site currently consists predominantly of open fields and woods. The site is bound to the east by agricultural fields, to the north and west by several single-family lots, and to the south by interstate 75. The existing tributary area consists of type B, C, B/D & C/D soils. The site drains via overland flow to the north and west to a stream flowing to the north.

The proposed development consists of 119 single-family units and three (3) large open space reserves with associated roadway, walkways, site utilities, and two (2) retention basins. Post construction drainage patterns will generally follow existing conditions. This will be done by utilizing the two (2) proposed retention basins located in the northern and western areas of the site.

Drainage swales and an underground storm sewer network will be constructed to convey runoff to the proposed retention basins. The stormwater runoff will be collected using a system of curb & gutter inlets and catch basins at localized low points. The storm sewer design on this project will be based on the 10-year storm event and checked using the 25-year storm event in accordance with the regulations set forth by the Warren County Stormwater Design Manual. If a higher storm event would take place or clogging/obstructions were to occur the site will be properly graded to convey the 100-year storm event by overland flow to the proposed retention basins while providing a minimum 1-foot of freeboard from any home.

Runoff from the development will be routed to the proposed retention basins. The proposed retention basins will be utilized to serve the site for both water quality and water quantity purposes. During the final engineering process, CESO, Inc. will develop a detailed stormwater management plan designed to meet the requirements set forth by the City of Franklin, outlined by the Warren County Stormwater Design Manual, as well as the water quality requirements set forth by the Ohio EPA General Construction Permit OHC000006.

## Sanitary Sewer

Existing sanitary sewer is accessible at the current end of Pleasant Hill Boulevard and Troy Avenue at the existing.

## <u>Water Main</u>

Existing water main is available at the current end of Pleasant Hill Boulevard and Troy Avenue. Water capacities would need to be confirmed based on the proposed development plan, including ample fire flow capabilities in the water distribution system for residential uses.

Should you have any further questions, please do not hesitate to contact me.

Respectfully,

Justin Elam, P.E. Senior Engineer elam@cesoinc.com (937) 401-3959