KRISTEN L. ATHA Director



June 13, 2022

Mariah B. Anderson, PE EMH&T, Inc. 5500 New Albany Road Columbus, Ohio 43054

RE:

Stormwater Drainage Manual (SWDM) Type II Variance Request – Alkire & Norton Road Site Wet Basins

Ms. Anderson:

This letter is in response to the subject variance request to SWDM Section 3.4.1 Dry & Wet Detention Basins. Specifically, a deviation from the Layout and Geometry requirement No. 5 - side slopes of the dry detention basins and above the permanent pool of the wet detention basins to be no steeper than 4:1 - is being sought.

The SWDM Variance Type II (Non-Stream Protection) Request was submitted to the City on April 21, 2022. As part of the Variance review process, the subject Variance request was posted on the City website on May 3, 2022 to solicit public comments. No public comments were received by the published deadline.

The Variance Review Committee met and reviewed the subject Variance Request on June 8, 2022. The Variance Request was found to be in compliance with the SWDM Type II Non-Stream Protection Variance Application requirements. The applicant requested a variance from the SWDM design requirements as stated above due to substantial hardship to fully comply with the 3.4.1 SWDM requirement.

Wet ponds are proposed for this development due to significant earthwork shortages and the need to import substantial amounts of soil material. Due to the close proximity to the Columbus Regional Airport Authority (CRAA) Bolton Field Airport, CRAA has reviewed the proposed wet pond design for the purposes of waterfowl hazard mitigation and recommended side slopes of 1.5:1 above normal pool for a horizontal distance of 4 ft., and a vertical distance of 3 ft. Additionally, CRAA has also advised that tall grass mixture be planted on the side slopes to prevent a desirable habitat for waterfowl. Therefore, to mitigate the waterfowl hazard as recommended by CRAA, the subject variance approval is being sought.

The proposed wet basins will provide stormwater quantity, quality and design features, including the safety bench, in full compliance with the SWDM requirements, with the exception of the side slope grade requirement for which the variance is being requested. Additionally, the subject project is located within the Big Darby Watershed. To comply with the Big Darby Accord water quality/groundwater recharge requirements and in coordination with OEPA, a sand filter is proposed on-site.



An alternative, full SWDM compliance solution was also reviewed. This alternative, while providing the required 4:1 side slopes, would utilize "bird balls" to discourage waterfowl habitat. The solution, while achieving the intended goals, was found to be unfeasible due to its substantial cost.

Upon reviewing and discussing the application submitted by the applicant, the Variance Review Committee agreed with the applicant's argument that full adherence to the SWDM Section 3.4.1 detention basin side slope requirement for this proposed development is impractical, costly and difficult.

In light of the above, the subject Variance Request (Preferred Alternative) is conditionally approved contingent upon the following stipulation:

- Storm CC-Plans and Stormwater Management Report to be submitted and approved by the City
- Full compliance with the Big Darby Accord water quality/groundwater recharge requirements, in coordination with the Ohio EPA, is required.

No approval contained herein relieves or absolves the applicant of any provisions of applicable state or federal laws. Please contact Plan Review/Stormwater & Regulatory Management Section Manager Greg Fedner, P.E. at gfedner@columbus.gov or by phone at 614-645-8072 with any questions.

Sincerely,

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John G. Newsome, P.E., Administrator Division of Sewerage and Drainage

pc: Variance Review Committee

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