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August 18, 2023

Kafi Howard
Town Engineer-Stormwater
Town of Blacksburg
Engineering and GIS Department
400 South Main Street
Blacksburg, VA. 24060

RE: RZN23-0002 Habitat for Humanity Airport Road PRD – Stormwater Concept Plan Letter of Denial

Dear Kafi,

The following letter hereby addresses the comments provided to our office dated August 11, 2023 for the above project. Please find our responses to your comments below in bold.

Items to be addressed for Stormwater Concept Plan Approval:

- 1) The stormwater narrative must specify the stormwater criteria applicable to the site. Currently not enough information has been provided to satisfy compliance. Please see the issues below:
 - a) The narrative mischaracterizes the discharge from this site stating, “The entire conveyance system from the site to this point (point of analysis) is a manmade conveyance system.” This suggests that the stormwater criteria assumed should be Town Code section 18-613(b)(1), but it is not clearly stated.
Response: The applicable criteria for the proposed approach (and alternative approach that will be attempted at the site plan stage) is now stated in the narrative.
 - b) This site can only claim the above statement if the discharge pipe of the stormwater detention system physically connects to the inlet on the adjacent Airport property. Currently the pipe discharged upstream of this inlet.
Response: Noted. Calculations in narrative show that Town Code §18-613(b)(3) (the energy balance equation) has been met in the event that permission to tie directly into the stormwater inlet is not able to be accomplished.
 - c) With the current layout of the site illustrated in the Stormwater Concept Plan, the appropriate stormwater management criteria would be 18-613(b)(3), which requires the calculation of the Energy Balance Equation. This calculation was not included in the Stormwater Concept Plan.
Response: The energy balance calculation has been added to the narrative.



- 2) The positioning of the underground stormwater facility appears to be too close to the proposed public stormwater line going under the parking area. There is not sufficient room for a 15-ft public drainage easement to be centered on the public bypass pipe and not overlap with the private drainage easement needs for the stormwater facility. These must be shifted to be separate.

Response: The position of the underground facility has been revised such that there is room for a 15-ft public easement around the public bypass pipe that does not overlap with the easement around the private facility.

- 3) Access to the underground stormwater facility will need to be addressed.

Response: The plan has been revised to label observation ports and access via manhole structures per the manufacturer's recommendations and typical details. Additional information has been added to the narrative on Page 7 describing the debris control that is built into the system design and typical maintenance procedures.

If you have any additional questions or comments, please feel free to contact me.

Sincerely,

BALZER AND ASSOCIATES

James R. Taylor, P.E., M.ASCE

Associate