

9/13/2019

City of Smyrna – Community Development Office
3180 Atlanta Road
Smyrna, GA 30080

Re: **Preliminary Hydrology Analysis**
Pebblebrook Road @ Buckner Road
Planners and Engineers Collaborative, Inc. Project No. 19102.00A

Dear Community Development Staff,

See below the findings of the preliminary hydrology analysis:

Water Quality (Runoff Reduction)

Water Quality for the site will be treated by capturing and infiltrating the first 1.0” of runoff from the site. The proposed stormwater facilities will reduce Total Suspended Solids (TSS) generated from the site by 80%. Target pollutants for removal are TSS as well as trash/debris, however some removal of additional pollutants such as Fecal Coliform, bacteria/pathogens, nutrients and heavy metals is expected as well. All stormwater facilities will be designed per municipal ordinances and the Georgia Stormwater Management Manual (GSWMM) Volume 2 (2016 Edition).

Channel Protection

Channel Protection will be provided by capturing the volume of runoff from the 1-Year Storm Event in the stormwater facility and slowly releasing it over the following 24 to 48 hours. This is intended to slow velocities in downstream waterways that would otherwise cause streambank erosion.

Detention

The proposed stormwater facility will be designed to control releases from the development and release them to a ‘predeveloped’ condition. The predeveloped condition represents a peak flow that would be generated from a completely wooded or ‘natural’ condition. Additional analysis will be conducted on the downstream conveyances to ensure that they are adequate and in good condition. Flows from the site may be reduced even further if a threat to public safety is identified.

Floodplain

There are no areas onsite that have been identified as a FEMA special flood hazard area.

Conclusion

A more detailed hydrology analysis will be performed at the time of LDP.

The applicant and developer welcome any questions regarding the above information.



Sincerely,
Planners and Engineers Collaborative, Inc.

A handwritten signature in blue ink, appearing to read 'Ken Wood', written over a solid black horizontal line.

Kenneth J. Wood, P.E., LEED AP
President

For the Firm

kjw/ht/dp