



March 6, 2019

City of Smyrna  
2800 King Street  
Smyrna Ga 30080

**Re: Post-Developed Stormwater Management – Hearthside - Smyrna**

Dear Mayor and Council:

This memo is being provided as a supplement to the rezoning package for the proposed Hearthside – Smyrna development, a senior living community comprised of age-restricted apartments, to summarize the measures that will be utilized to provide flow attenuation and treatment of the post-developed stormwater runoff generated as a result of the proposed development. All proposed improvements will be designed in accordance with Chapter 46, Article V – Stormwater Mangement of the City of Smyrna's Code of Ordinances.

The site is currently divided into three basins. The smallest basin is comprised of a small portion of the site that drains to grassed swale located on the north side of the East-West Connector, the second largest basin drains to the existing stream in the northeast corner of the site and the largest basin drains west to the Creekside at Vinnings townhome development. The proposed stormwater management plan will be designed to maintain the existing drainage basins as much as possible in the post-developed condition and any headwalls will be designed with outlet protection per the green book.

Due to the shape and size of the existing site, the majority of stormwater runoff from the disturbed area will be collected via surface drains and conveyed via a series of underground pipes to one of two underground ponds which will be located under the proposed parking lot along the north side of the site. The perimeter portions of the site and the proposed driveway will bypass the underground ponds. Runoff from the driveway will be discharged into the existing grass swale along the north side of the East-West Connector. The proposed underground detention ponds will be designed with an outlet control structure to attenuate the post-developed peak flow rate below the pre-developed and/or allowable flow rate for the 1, 2, 5, 10, 25, 50 and 100-year 24-hour return frequency storm events thus meeting the City's requirements for overbank and extreme flood protection. In addition to flow attenuation, the outlet control structure and pond will also be designed to provide channel protection per the City's criteria and water quality will be provided via a proprietary treatment device. The selected device will be taken from the current ARC approved device list as allowed by the GSMM. A post-development downstream analysis will also be provided and special attention will be given to the point at which the site area is equal to or less than 10% of the overall basin used for the downstream analysis.

All of these measures will be combined together to provide a treatment train for the proposed development and the owner of the facility will provide an inspection and maintenance agreement in accordance with the City's criteria. Feel free to contact me should you have any questions or concerns.

Sincerely,

A handwritten signature in blue ink, appearing to read "KJ S", with a long horizontal flourish extending to the right.

Kyle Sharpe, PE  
Project Manager  
LeCraw Engineering, Inc.