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November 11, 2017

I am pleased to provide this report of my review of the stormwater documents for the proposed Denton Cove Apartments, to be located at Avenue L and 17th Street, Apalachicola, Florida. My qualifications to conduct this review include a Bachelor's degree in environmental engineering, a Master's degree in engineering management, licenses to practice engineering in Florida, Georgia and New York, and a 23 year career focusing in stormwater. I recently retired from my position as the Department of Environmental Protection's State Stormwater Engineer, a position which was preceded by a fifteen year career with the Northwest Florida Water Management District as Bureau Chief and creator of their Environmental Resource Permitting bureau and their Surface Water bureau.

My review indicates that the proposed stormwater system appears to be in compliance with the City of Apalachicola's stormwater ordinances.

The development appears to qualify for a general permit under Chapter 403.814 (12), Florida Statutes, which is consistent with Apalachicola City Ordinance VIII.A.1's requirement for a stormwater discharge facilities permit.

The project consists of one (1) dry retention system, to serve the 3.66 acre development. Total impervious surface for the project is 1.82 acres, totaling 49.99% of the total project area, and consists of buildings, parking and drives, a pool patio, and playground area. The system will provide water quality treatment for the runoff generated by the first one (1) inch of rainfall. Approximately 0.37 acres (10% of the total project area) on the exterior boundary of the property will bypass the system due to the infeasibility of regrading the area to drain toward the pond and match existing grades at the property line. The retention system has been designed to overtreat the remaining area by 10% to compensate, in accordance with Chapter 62-330, Florida Administrative Code, which is also allowable under City Ordinance VIII. Stormwater Management Plans.

The system will also attenuate both the 2-year, 24-hour and the 25-year, 24-hour storm events, in accordance with the requirements of the Northwest Florida Water Management District (NFWFMD) and City of Apalachicola, respectively. In addition, the system will also attenuate the 100-year, 8-hour storm event, for reasons outlined in the next paragraph.

Two offsite basins drain to ditches which will be impacted by the development. Basin 2 (Basin 1 consists of the proposed development) drains to a culvert located in the ditch adjacent to 17th Street. The culvert has been sized to convey the 100-year 8-hour peak flow without overtopping the ditch. The second offsite basin, titled Basin 3, drains to a new culvert crossing in the ditch on Avenue L. This culvert was also sized to convey the 100-year 8-hour peak flow without overtopping the ditch. The culverts allow the runoff from the two offsite basins to be diverted and conveyed around the proposed stormwater system, diverting it around the proposed development. This is consistent with the NFWFMD Environmental Permitting System rules and Apalachicola City Ordinances.

An operation and maintenance plan and schedule for the stormwater system has been proposed, which is appropriate for the type of treatment designed.

I appreciate the opportunity to provide these services. If you have any questions or concerns, or if I can be of any further service, please don't hesitate to contact me at 850-508-9275.

Sincerely,

A handwritten signature in blue ink that reads "Lee Marchman". The signature is written in a cursive style with a light blue background behind it.

Lee Marchman, P.E.