



Project Narrative

Aria is an approved development containing 182 lots. Due to market demands Neal Signature Homes LLC is proposing to change lot sizes in a portion of phase 4 from 72'x130' to 57'x140'. This will increase the total number of lots in the development from 182 to 196, an increase of 14 lots. This work will take place within parcel id #'s 0389-16-1000 and 0390-05-1000 (tracts 800 and 801).

Along with the new lot sizes there will need to be adjustments to the adjacent ponds. Lake LL-1 will decrease in size by approximately 7,200 sf(0.17 acres) or 0.5%.

Lake LL-2 will decrease in size by approximately 20,000 sf(0.46 acres) or 1.7%

The lakes are located within parcel id # 0390-05-1000 and platted tracts 500 and 502.

The original drainage report prepared by Stantec dated November 11, 2017 included an analysis of the predevelopment vs post development discharge rates for the 25 year 24 hour storm event. Overall the predevelopment discharge rates totaled 46.65 cfs while the post development discharge rates totaled 34.02 cfs. With these proposed modifications the peak discharge rates total 34.36 cfs which is still significantly below the predevelopment discharge rate of 46.65 cfs.

AM Engineering, LLC was provided the ICPR model for the proposed conditions(PCM) for ARIA . AME adjusted the lake sizes by the above referenced amounts (RPCM). Included in this report is the DBF comparator results between the two models and the node comparison for both the 25 year storm and 100 year storm events. The differences at most of the nodes are zero and some node differences are negligible.

Several exhibits are included in this report:

Exhibit A-Original Stantec peak rate summary and I have added the proposed peak flow rates for the 25 year 24 hour storm in red

Exhibit B-Original Stantec Node-Path aerial

Exhibit C- Node comparison for both the 25 year and 100 year storm events

Exhibit D- The results of the link connections in the revised proposed conditions

Exhibit E-DBF comparator

Along with the additional lots a berm will be constructed along the west side of Bocelli Drive. This berm will have minor impacts to existing upland cut ditches, see Exhibit F for survey of these ditches. The impacts are as follows:

Upland cut ditch B impact = 196 sf

Upland cut ditch C impact = 110 sf

Upland cut ditch D = 2,740 sf



Civil Engineering | Land Surveying

8340 Consumer Court Sarasota, FL 34240
Phone: (941) 377-9178 | Fax: (941) 378-3786
www.amengfl.com

Exhibit G-Curve number calculations from the original Stantec report and proposed curve number calculations.