

To: Troy Baughman

Sent July 30, 2014

With your help I've been able to gain a more complete access to both the Village Oaks and Upper Mallets Creek drainage reports. Thank you for your help. After studying them quite thoroughly I have some questions that I hope you can answer. I'd be happy to try a dialogue via email but a meeting at your office may be necessary to make the most efficient use of your time.

Questions about the Village Oaks-Chaucer Ct study (VO)

1. How do the peak flow rates of the 2010 storm (appendix) relate to the existing storage data (fig 2, page 2) in explaining the flooding? Kerrington/Brookdale had adequate storage yet had 8.6 peak flow. Country Place was 50% below required volume of storage yet had 0 peak flow. All the developments listed in the storage review were smaller than required except Kerrington/Brookdale yet only The Meadows was listed as undersized. Do developments need to retain and slowly release ALL of their flow under the past/current rules?
2. Alternatives 5 and 7 were recommended as the best solutions given the cost and water standards of Mallets Creek. Have the upstream basins been restored and enlarged to the required volumes listed in figure 2. Have the restrictors, pipes, and orifices been upgraded to the proper sizes for Kerrington/Brookdale, Country Place, and The Meadows? If Village Oaks needs 22,000 ft³ (page 10) why proceed with 14,061 ft³ amount in the recommendations?
3. A regional detention basin was mentioned after the recommendations that could provide help if the volume deficiencies were not met by each individual development but I don't have access to appendix 5 that provides cost and allocation estimates. I'd really like a copy of this appendix. What volume does it recommend, for what level of storm, at what cost breakdown? How does the 2250 Saline--Ann Arbor Rd detention basin compare to these estimates? Does this proposed community detention pond assume the higher volume needs for Village Oaks?

Questions about the Upper Mallets Creek Study

1. Can table IV-2 on page 28 showing Output of Runoff Rate Model be related to the peak flow rate in the VO study? Explain 6 and 12 inch ponding.
2. Page 35 states that "the data from the previous study (i.e. the VO study) were included in the modeling efforts for the Upper Mallets Study, with the assumption that the recommended improvements were in place" and yet the appendix A results show that Village Oaks and Chaucer Court flooding under all scenarios--2, 10, and 100 year rains. It also states on page 38 that proposed storm sewer system improvements suggested for the Chaucer/Ascot/Lans area would exceed the storage available downstream. Couldn't this lead to the decision to increase the needed storage capability in the detention pond recommended for the 2250 Saline Ann Arbor Road property? Did this happen? If yes, to what level of storm was the capacity increased? As need for water runoff detention rises to properly protect the lower areas, does the size of the pond become so large as to make the proposed development financially unattractive? Did the city consider purchasing the property to more effectively address the downstream flooding?

Again, thanks for your help and I await your reply.

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