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October 24, 2024

Mr. Colton Leonard, City Planner & Mr. Kelly Vanlandingham, PE, City Engineer City of Bryant, Arkansas Community Development 210 SW 3<sup>rd</sup> Street Bryant, Arkansas 72022

Re: Preliminary Plat 3927 Springhill Road, Bryant, AR Parcel # 840-11855-000

Dear Mr. Leonard and Mr. Vanlandingham:

Please accept this letter in response to your latest comments as provided in an email on October 22. 2024. I will address the items in the order expressed (my response is shown in **bold italicized**):

## **Drainage Calculations**

- The contours on the post construction drainage map (page 15) are so bold that I cannot read the inlet numbers or the flows. Not sure what the issue is on this matter. The separate pdf (large scale) that was a separate attachment shows up fine on our computers. I am resending it (full size).
- 2. At the bottom of page 20 Q bypass says 0% but it should be 32.6%. Whereas the amount of by pass is correct, I did not adjust the percentage. This typo has been corrected. The amount of by pass was included in the down stream inlet.
- Page 33, show calculations for slotted weir. Is clogging included in the calculations?
  Yes. The vertical opening in the weir structure (below the 100 year storm elevation) is 2.78 sf. The horizontal opening on three sides of the box add 4.00 sf of opening, for a total of 6.78 sf. This is well more than what is needed for clogging.
- 4. Page 34, detention pond calculations must show that post-construction flows from the pond are less than the pre-construction flows for 2, 5, 10, 25, 50, and 100 year storms (Section 1000.5.6, paragraph 2). This is actually presented in the Summary-Detention Chart shown on Sheet 33.

## Drainage maps

- The post-construction map shows the discharge from Control Point A as being 12.88 cfs. Page 34 in the calculations shows it as being 16.81 cfs. *This has been corrected. See attached revised map.*
- The post-construction map shows discharge from Control Point B and C and there is no discharge shown in the calculations. This has been corrected. See attached revised map.
- The post-construction map shows discharge from Control Point D as being 17.74 cfs but the calculations on page 34 show 38.08 cfs with no detention and 16.45 cfs with detention. *This has been corrected. See attached revised map.*

## **Construction Plans**

- 1. Sheet 3 of 10 shows the existing18" culvert stopping just behind the curb of the half-street improvements. Since the existing ditch will be graded over, it appears that this pipe should be extended to the north and pick up flow from the north. We will need to consult the owners as to when the half street improvements will be constructed. If the City and the Owner agree to an in leu of cost clause, the pipe will need to end in the vicinity of where it is shown on the existing plans. We are willing to discuss this with staff.
- 2. Sheet 3 of 10, show the existing ditch & culvert to the south of JB#3 along Springhill Road. Show details on how the outlet looks and how the flow will be handled to the south. We will be matching the existing half street road improvements from our planned intersection, to the South. This has been added to this sheet.
- 3. Sheet 5 of 10, show inlet numbers. *Added as requested*.
- **4.** Sheet 5 of 10, Is the top 4" slot all the way around the box beneath the top? **Yes. I have added additional information on this detail to better represent this item.**

Please let me know if you need anything additional.

Sincerely,

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Tim Lemons, PE