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MEMORANDUM

Date: June 27, 2025 To: Michael Elabarger From: Jacqueline Thompson, PE Subject: Hills at Harris Creek CID 24-07, 3rd Submittal Town of Rolesville, NC

This memo summarizes the review of the Construction Plans submitted by Strong Rock Engineering Group, dated 02/03/2025 (received 06/04/25).

Due to the revisions to the layout of the site, the plans have been reviewed as a fresh set.

<u>Sheet C6.1:</u>

- 1. On a later sheet, it is clear where the electric easement on the north side of the site is. Please include a leader showing/labeling the width. Currently the label is not clear where the electric easement is and it looks like linework is missing.
- 2. The Town does not want or support the "eyebrow" or "bubbles". This is new on Street A and was not included in the previous 2 submittals, nor the concept plan. This should be revised.
- 3. The number of mid-block crossings should be limited for a through street. Please review Boulder Mill Drive and revise accordingly.
 - a. Mid-block crossings should have the appropriate signing and striping to notify drivers.

Sheet C6.2:

4. The section of Pluton Ridge Drive at Mitchell Mill Road is wider than the adjacent streets and has increased since the last submittal. Please explain why there is a need/requirements to have this section of street wider than the adjacent streets.

Sheet C6.5:

5. Please confirm why the sidewalk ends and has a missing section between Limestone Wall Lane. It was previously continuous.

Sheet C-8.1:

- 6. REPEAT: Confirm drainage between and behind the homes are occurring and being captured as intended. It appears some drainage flows from one building pad to another without water being captures in structures or swales.
- 7. Swales that extend over 2 or more lots require a drainage easement or a structure.

- 8. Consider a structure on the south side of the Street A and Pluton Ridge Drive intersection to capture water before it drains across the street, unless the curb Is being designed/graded to flow around to CB#33.
 - a. Will the gutter be turned out, or what is the intended flow pattern in the intersection?
- 9. The building pads should be reflected in the grading.
 - a. This comment applies to multiple lots, and multiple sheets.

Sheet C-8.2:

- 10. Confirm the intent for the drainage pattern in the area behind Lots 1-6. As water is sheet flowing to the north, how is it drainage at the driveways? Consider adding a swale/culvert as needed.
- 11. Consider driveway locations with the catch basin locations. The Town of Rolesville prefers structure to be outside of the driveway due to requiring curb transitions to standard curb at the structures. See the Town's Standards Manual.

Sheet C-8.4:

- 12. Confirm the drainage design intention for the 200+ feet of the dead end of Flatrock Ridge Street. How is the water being managed before leaving the site?
- 13. Consider a structure on the south side of the Millpond Bluff Drive and Flatrock Ridge Street intersection to capture water before it drains across the street, unless the curb is being designed/graded to flow around to CB#69.
 - a. Will the gutter be turned out, or what is the intended flow pattern in the intersection?
 - b. Structures were previously provided at this intersection.

Sheet C-10.0:

14. The 8% grade on Boulder Mill Drive will not provide ADA compliant sidewalks. Additional measures will need to be taken to meet the Town's latest policy:

Every effort shall be made to ensure that all sidewalks are compliant with the Americans with Disabilities Act (ADA), regardless of street grade. However, when streets feature slopes that exceed the grade permissible for ADA-compliant sidewalks, the following measures should be implemented:

- A detailed map must be provided that outlines an accessible route through the development. This route should ensure ADA access to all community areas and, where feasible, as many private lots as possible. The map should clearly identify which roads or areas have sidewalks that do not meet ADA accessibility standards.
- 2. For streets with a longitudinal slope between 5% and 8%, where the sidewalk is not ADA-compliant, steep grade warning signs (W7-3P) must be installed approximately every 300 feet.
- 3. For streets with a longitudinal slope greater than 8%, where the sidewalk cannot be made ADA-compliant, no sidewalk shall be provided.
 - a. In such cases, sidewalks should terminate at logical points within the development that ensures a continuous pedestrian pathway, facilitating access throughout the area.

Sheet C-11.1:

- 15. Mid-block pedestrian crossings will need the appropriate signage included. Please review and revise accordingly.
 - a. This comment applies to multiple sheets.
- 16. Please include what the speed on the speed limits signs are.
 - a. This comment applies to all signing and striping sheets.
- 17. Consider if the crossing of Boulder Mill Drive at Street A should be there. The crossing at Mitchell Mill Road is fairly close proximity, and the stop at the crosswalk at Street A could back traffic up onto Mitchell Mill during peak hours.
- 18. Please confirm if the intention is to have an all-way stop at crosswalks or if one direction of travel is to be through traffic. Currently there are stop bars and stop signs on only one side of the crosswalk which will allow for through traffic on the opposite direction of travel. This could cause issues if the pedestrians are expecting traffic to stop.
 - a. This comment applies to all pedestrian crossings.

Sheet D-1.0:

- 19. Detail 2 (50' ROW) calls out rolled curb but appears to show standard curb. Please confirm the intent and adjust accordingly.
- 20. The trees currently appear to be planted right next to the sidewalk in several of the typical sections. This causes concern for planting and growth including increased sizing of the trunk and the roots with the sidewalk. Please adjust.

Sheet D-1.2:

21. The Town of Rolesville reference NCDOT details for pedestrian ramps. Please remove the City of Raleigh detail and include NCDOT details as appropriate.