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MEMORANDUM

Date: December 20, 2024
To: Michael Elabarger
From: Jacqueline Thompson, PE
Subject: Kalas Falls Phase 3
CD 21-07, 4th Submittal
Town of Rolesville, NC

This memo summarizes the review of Construction Documents submitted by American Engineering Associates, dated 11/01/2024 (received 12/05/2024).

Sheet CVR:

1. With the next submittal, please include the following additional information:
 - a. A storm package including the following:
 - i. HGLs for all storm pipe (all HGLs need to be within the pipe for a 10-year storm event; 25-year storm event for all culverts)
 - ii. Gutter spread
 - iii. Riprap calculations
 - iv. Drainage area maps
 - b. A lighting plan (please show utilities on the lighting plan to confirm no conflicts).

Sheet 3.1:

2. Please update the tables to:
 - a. Confirm CB 339B to CB 339A, and CB 365A to CB 365B is intended to lay flat.
 - b. Confirm JB 392A to FES 392, CB 369A to CB 369, and CB 350 to FES 349 allows for positive drainage with the 0.37% slope; revise if necessary to prevent sediment sitting in the pipe. All pipes should produce a velocity of at least 2.5 fps.
 - c. Confirm pipes do not produce a velocity exceeding 20 fps.
 - d. Label pipe material.
 - e. Avoid text overlap

Sheet 4.1:

3. Please label the greenway material (ie. Asphalt) throughout the plan in the greenway labels and leaders.
 - a. This comment applies to all applicable sheets.
4. Please label proposed contours.
5. Update the page number referencing the swale material in the notes.

Sheet 4.2:

6. Adjust text that is overlapping.
 - a. This comment also applies to Sheets 4.4
7. Based on the proposed grading, the yard inlets seem unnecessary. Please confirm intent and if they are for the lot grading or if they are truly intended for the ROW drainage.
 - a. This comment applies to all drainage sheets.
8. Confirm the curb for the parking lot has positive drainage out and around. If not, consider adding storm sewer in the corner.

Sheet 4.3:

9. Label all drainage easements.

Sheet 5.2:

10. Thank you for making the revision for standard vs. valley curb. There is still a note for standard curb on the cul-de-sac of Pleasant Run St. Please clarify if this is the intention. The Town would prefer valley curb on this street.
 - a. Due to the local roads having valley curb, consider shifting the curb transition to before the Pleasant Run St and Falls Bluff Drive intersection.

Sheet 6.1:

11. It would be beneficial to see driveway locations on the utility sheet. The Town of Rolesville prefers if CBs are outside of driveways and allow room for the curb transitions.

Sheet 6.5:

12. Freeze the partial contours from the SCM(s) since contours are frozen on the utility sheets.

Sheet 7.0:

13. The Town of Rolesville prefers all vertical curves to be in 50' increments, and per NCDOT standards, the minimum K value is 30 (stopping conditions allow for a K value of 14).
 - a. This comment applies to all street profiles.

Sheet 8.0:

14. Confirm minimum cover is being provided for all pipe. Consider adding labels defining the required cover.
 - a. This comment applies to all profiles.

Sheet 9.0:

15. Confirm whether the color is intentional. If not, please adjust plotting styles.

- a. This comment also applies to Sheet 9.1.

Sheet 9.1:

16. Confirm the water offset and crossing are drawn correctly near Station 56+50.
17. Update the station label for CB811 near Station 63+00.
18. Confirm all crossings have minimum separation being met; add labels defining the separation (either what is being provided/designed or the minimum required).
 - a. This comment applies to all profiles.

Sheet 10.0:

19. Label the proposed temporary grade on the west end of Donnington Hill Drive, in the profile.

Sheet 17.0:

20. Update station labels for the profiles on this sheet were missing.
21. Confirm minimum slope is being provided to allow positive drainage in all segments.

Sheet 18.0:

22. Confirm all culverts along the greenway have the minimum cover being provided.

Sheet 19.0:

23. The alignment stationing is missing from this sheet.

Sheet 21.0:

24. There is small text showing up on this sheet that doesn't seem like it belongs. Please review and adjust accordingly.
25. Consider adding crosswalks where there is not stop conditions and/or at mid-block crossings.
26. At the dead-end street locations there is duplicate text calling out the barricades that also overlapping. Please review and adjust accordingly.

Sheet L1:

27. Please show the driveway location to confirm the trees are not in conflict.
28. Please show utilities to confirm there are no conflicts with the trees.