



June 3, 2025
AVO 37449.004

Ms. Ramie Hammonds
Development Services Director/Building Official
City of Sanger
201 Bolivar Street
P.O. Box 1729
Sanger, Texas 76266

Re: Lois Road Estates Filing 3 Construction Plans Review

Dear Ms. Hammonds,

Halff Associates, Inc. was requested by the City of Sanger to review the Phase 3 Construction Plans for Lois Road Estates. The submittal was prepared by Atwell and was received on May 19th, 2025.

General Comments

1. Please address comments on attached markups and provide annotated responses on markups. Please note, all comments may not be written on letter since some comments are easier to show and explain on the markups. Please annotate markup with responses.
2. Please note additional comments may be provided in subsequent reviews once additional data/responses is received.

Hydrology and Hydraulics

1. Please provide profiles for Runs 19 and 20 for storm sewer pipes. See sheets 146 and 147 "Storm Sewer Plan & Profiles Run 19" and "Storm Sewer Plan & Profiles Run 20".
Response: These profiles have been corrected to display.
Halff Review: Run 20 has been updated, please provide profile for Run 19.
Halff Review 2: Runs 19 and 20 plan and profiles are not in the current phase of the project. Please note that phases including these areas will not be approved until these comments are addressed.
Halff Construction Plan Review: Comment will move to Filing 4 because it is not located within the area of this submittal.
2. Please provide pipe slopes and dimensions for the profiles in Runs 31 and 32 for storm sewer pipes. See sheets 159 and 160 "Storm Sewer Plan & Profiles Run 31" and "Storm Sewer Plan & Profiles Run 32".
Response: Pipe sizes and slopes have been added to the profile
Halff Review: Addressed
3. Pipe on north side of site appears to discharge into a separate system than every other pipe in design and does not appear to discharge into detention pond. Please provide more detail on where this pipe outfalls and provide supporting calculations to show that discharges are not increasing from existing to proposed conditions and/or no negative impacts occur. See sheet 5 "Overall Utility Plans Overall".
Response: This pipe is existing and will be demolished. The style has been changed and a label has been added to the plan
Halff Review: Style unchanged on existing pipe on sheet 5. Please revise.
Halff Review 2: Addressed

4. Pipe on sheet 127 "Storm Sewer Plan & Profiles Run 1" has no upstream connection. Please revise such that it is connected to the rest of the storm sewer system
Response: The upstream pipe has been added to the profile view
Halff Review: Addressed
5. Please provide existing and proposed drainage area map(s) and calculations. Submittal will need to show that no increases in discharges occurs between existing and proposed conditions.
Halff Review: Addressed
6. Please provide hydraulic grade line calculations and profiles for all storm sewer profiles.
Response: Existing and proposed drainage maps have been added to the plan set
Halff Review: Please provide HGL for Run 15. See Sheet 152 "Storm Sewer Plan & Profiles Run 15"
Halff Review 2: Run 15 plan and profile has been removed from current plan sheet. Please note that Phases including these areas will not be approved until these comments are addressed.
Halff Construction Plan Review: Please provide HGL for Run 5. See Sheet 52 "Storm Sewer Plan & Profiles Run 5"
7. Please provide pipe velocities and calculations for all storm pipes.
Response: Hydraulic calculations have been added to the plan set
Halff Review: Please provide calculations for Runs 1 and 33. Please see sheets 174 and 175.
Halff Review 2: Previous comment was not addressed. Please provide calculations for Runs 1 and 33. Please see sheets 81 and 82.
Halff Construction Plan Review: Addressed
8. Please provide inlet calculation sheets. Also please show inlet length and type on plan view in sheets.
Response: Inlet calculations calculations have been added to the plan set
Halff Review: Addressed
9. Please provide easements for storm sewer and detention ponds per § 10.106(d)(10)(E)
Response: Easements for storm sewer and drainage facilities have been added to the plan and plat
Halff Review: Addressed
10. Please provide calculations showing that detention pond will drain within 24 hours per § 10.106(d)(10)(F).
Response: Pond drainage calculations have been added to the pond plan Sheets
Halff Review: Addressed
11. Please provide emergency spillway for ponds A, B, and C.
Response: Emergency spillways have been added to ponds A, B and C
Halff Review: Addressed
12. Ponds have 1-foot of freeboard, but do not account for sediment storage. Please provide 2 feet of sediment storage for the 100-year storm per § 10.106(d)(10)(A).
Response: Pond design has been revised to have adequate freeboard and sediment storage.
Halff Review: Addressed
13. Please provide pond bottom slope per ordinance § 10.106(d)(10)(C).
Response: Pond slopes have been added to the pond plans
Halff Review: Addressed

14. For ponds A, B and C, please provide HY8 models used for culvert calculations.

Response: HY8 model calculations and results have been added to the pond Plans

Halff Review: Addressed

15. Please provide longest flow paths and time of concentration calculations used for calculating time of concentration for each pond.

Response: Flow path and Tc calculations have been added to the pond plan sheets

Halff Review: Addressed

16. Pond D:

- a. Please provide emergency spillway weir and orifice elevations along pond D.

Response: Emergency spillway weir and orifice elevation have been added to Pond D plans

Halff Review: Addressed

- b. Please provide flow master model used for spillway and orifice calculations.

Response: Spillway and orifice calculations have been added to the pond plan sheets

Halff Review: Addressed

- c. Worksheet shows velocity of 10.35 ft/s leaving pond. Please include design for energy dissipation downstream of this structure or revise design. See § 10.106(d)(6)(B)(iii)

Response: Energy dissipation has been added to the pond design

Halff Review: Addressed

- d. GVF Output Data lists velocity as "Infinity ft/s". Please revise. See sheet 164 "Pond D Plan and Details".

Response: Velocities have been recalculated and revised on the plans.

Halff Review: Addressed

17. Please note that an Environmental Assessment will be needed on the 3 existing ponds on this site to determine impact of proposed development on wetlands. See Section 404 of Clean Water Act. See sheet 4 "General Notes & Plans, Existing Conditions."

Response: Comment noted. The Environmental Assessment is in process and will be provided upon completion.

Halff Review: Addressed

2nd Review Additional Comments:

18. Design HGL less than pipe invert in lateral line calculations. Please see sheets 176 and 177. Please revise.

Halff Review: Previous comment was not addressed. Please check Design HGL calculations on Sheets 83 and 84.

Halff Construction Plan Review: Calculations for laterals not provided. Please provide calculations for Lateral lines.

Final Plat First Review Comments:

19. Pipe drains unmitigated off site. Please see Sheet 68: "Storm Sewer Plan & Profiles Run 4" Please note that even if the entire site plan was approved, each phase needs to meet Sanger requirements as well. Please provide interim design to mitigate discharges.

Ms. Ramie Hammonds
June 3, 2025
Page 4 of 4

Halff Construction Plan Review: Addressed

Construction Plan Review Comments:

20. Energy Dissipation riprap not aligned with system outfall for Pond D. Please updated riprap or outfall location so that they line up. Please see Page 60 "Pond Plan and Details Pond D".

If you have any questions or need additional information, please do not hesitate to call me at (214) 937-3954.

Sincerely,
HALFF
TBPELS Firm No. 312

A handwritten signature in black ink, appearing to read "Randall Peterman". The signature is fluid and cursive, with the first name "Randall" being more prominent than the last name "Peterman".

Randall Peterman, PE, CFM, ENV SP