



February 26, 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 Preliminary Construction Plans Review**

Dear Ms. Hammonds,

Halff Associates, Inc. was requested by the City of Sanger to review the Preliminary Construction Plans for Lois Road Estates. The submittal was prepared by Atwell and was received on February 14<sup>th</sup>, 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".
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".
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".
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
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.
6. Please provide hydraulic grade line calculations and profiles for all storm sewer profiles.
7. Please provide pipe velocities and calculations for all storm pipes.
8. Please provide inlet calculation sheets. Also please show inlet length and type on plan view in sheets.
9. Please provide easements for storm sewer and detention ponds per § 10.106(d)(10)(E)
10. Please provide calculations showing that detention pond will drain within 24 hours per § 10.106(d)(10)(F).
11. Please provide emergency spillway for ponds A, B, and C.

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).
13. Please provide pond bottom slope per ordinance § 10.106(d)(10)(C).
14. For ponds A, B and C, please provide HY8 models used for culvert calculations.
15. Please provide longest flow paths and time of concentration calculations used for calculating time of concentration for each pond.
16. Pond D:
  - a. Please provide emergency spillway weir and orifice elevations along pond D.
  - b. Please provide flow master model used for spillway and orifice calculations.
  - 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)
  - d. GVF Output Data lists velocity as "Infinity ft/s". Please revise. See sheet 164 "Pond D Plan and Details".
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."

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



Randall Peterman, PE, CFM, ENV SP