Project: Woodland Oaks 1st Plat – Public Low Pressure Sanitary Sewer System
Application Number: PL2021074
Application Type: Engineering Plan Review
Comments Dated: June 30, 2022

Engineering Review

1. Can the applicant provide cut sheets and additional information on the odor/control system they used as the basis of their design? Specifically, we would like to see cut sheets of the chemical storage tank and the control panel. **Per conversation with Ms. Bagwell standardization was discussed and language added into the specification.**
2. The Sewer Study states that the chemical feed pump is configurable and has the ability to change dose based on timing. Can the applicant provide clarification on this statement? For example, will the system be set up to provide a fixed flow rate based upon a timer or will the system be set up to have a variable flow rate that can be adjusted around peak and non-peak portion of the day. **The system will utilize two pumps, one for standard dosage and one for peak periods, both activated by a simple repeatable timer. The timers shall energize/de-energize their respective duplex pump receptacles. The pump speed/dosage shall be set manually. This system is the most simplistic and robust while being the least expensive and operator friendly. No programming of a PLC nor cost of said equipment is required.**
3. Delete the last sentence under Paragraph 6 of the Odor/Corrosion Control System Specification. Replace with "Acceptance of the system is contingent upon successful start-up, providing the required training, and providing complete Operation and Maintenance Manuals to the City in both hard copy and PDF form." **Language added under Item 6.**
4. Provide two chemical feed pumps, one firm and one standby. **Two pumps to be provided.**
5. Delete from the warranty the following "or eighteen (18) months from shipment, whichever occurs first." **Language removed.**
6. The bend at Woodland Oak Dr. and Blackwell appears to be a non-standard fitting size. If it is the intent to make the angle through bending of the pipe, please provide calculations showing that this does not exceed the manufacturer's recommended bending radius. Same for the bend at Woodland Shores Dr. and Blackwell. The forcemain has been revised with various bend radius curves as appropriate to maintain alignment intent. **The minimum permanent bend radius for 3" HDPE SDR-11 pipe is determined as follows. Rf = D/12*fR = 3.500/12*25 = 7.29' is the minimum long term bend radius. D is the pipe outside diameter. fR is the bend radius factor provided by the manufacturer based on wall thickness. The minimum design bend radius Rf of 7.5' occurs at the intersection of Blackwell and NE Woodland Shores Drive.**
7. The applicant stated that additional notes were provided concerning the epoxy lining of the manholes. did not see where this was addressed. **See note on Cover Sheet under Construction and Design Notes, Item 7. Manholes to be epoxy coated are then called out on Sheets C.401 and C.404.**
8. Additional comments will be provided as an attachment and in a form of a "marked-up" pdf of the plans, and a "marked-up" pdf of the "response to comments. **Addressed.**
9. Please be aware the "Low Pressure Sanitary Sewer Installation Manual" (or equivalent title language) shall be required prior to issuance of a Certificate of Substantial Completion for the project, and hence, no building permits shall be allowed until this document has been submitted and accepted by the City. **Acknowledged.**

Please forward all comments or concerns to Matthew Schlicht.