Lindsay Koskiniemi

From: Huebner, William < William.Huebner@strand.com>

Sent: Monday, June 12, 2023 2:40 PM **To:** Lindsay Koskiniemi; Clarence Wittwer

Cc: Ruiz, Morgan; Andrepont, Logan; Rusty Lofton

Subject: Mac Dr. Sewer

Attachments: Mac Dr. Sewer Map.pdf

Lindsay,

As we discussed last week, the issues with the gravity line that receives flow from the Powell Lift Station could be approached from a few different angles. I have attached a PDF showing the route of the gravity line in yellow. This follows from the force main discharge on Hammond and follows the route of existing 12" pvc and clay lines through town and to the main trunk line on Ave A to the WWTP. As you recall, the trunk sewer is being replaced as part of the GLO project (purple line). It is possible that some of the flow problems upstream are being caused by this line due to it's age, condition and size. I can't say for sure that the new GLO project will solve all these issues.

If the City were to look at upsizing the yellow line, that would be a substantial project. I can put together costs, but I can already say with confidence that this will be in the millions of dollars due to its overall length and location. A better option might be to conduct some smoke testing of the system to identify sources of Infiltration and Inflow. The map shows a lot of this area to still be old clay sewer lines and brick manholes. Combine that with several service line leaks along the route, and we could identify some significant areas that need line replacement to reduce I&I. In lieu of spending money on the main (yellow) line, it may be more cost effective to attack the smaller lines that are contributing to the overall problem.

If you would like, I can still provide you with a cost opinion for upsizing the line along the yellow route, but the more we look at this, smoke testing would be a better approach as a first step. I can put together some budget numbers for conducting a smoke test and manhole inspection for the area identified in pink. It would be a good idea to work the rest of the collection system into a periodic smoke testing regimen in the future, but this pink area is what may be contributing to the known problem right now.

Let me know your thoughts. If you have any questions, please don't hesitate to call.

Thanks,



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