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March 10, 2021

Mr. Sidney Forsyth
Director Water Department
Water Department
City of Cartersville
P.O. Box 1390
Cartersville, GA 30120

RE: City of Cartersville
East Main Street Pump Station Rebuild
027-21-140

Dear Mr. Forsyth

We appreciate the opportunity to provide a proposal for engineering services to assist with rebuilding the East Main Street Pump Station.

The purpose of the project is to provide additional pumping capacity which will serve current and future needs in the high pressure zone which hydraulically “floats” on the Center Road Tank. This tank also serves a substantial portion of the Bartow County system. The 3 Million Gallon Center Road tank is currently supplied from the Center Road Pump Station with a firm capacity of 1,200 gpm. Last summer, there were occasions when the station was unable to keep up with demand. Continued development in Bartow county will only make this situation worse – and it is reasonably certain that at some point in the near future the pumps will not be able to keep the tank full. The pump station has room for a third pump, which will allow a firm capacity of 2,200 gpm however, installation of the pump while keeping the pump station running is problematic. Further, from a risk assessment point of view, the pump station represents a single point of failure for what is rapidly becoming a large number of customers.

Accordingly, the City would like to evaluate the reuse of the Main Street Pump station to provide additional pumping capacity into the zone. The original Main Street pump station served a relatively small zone with no tank along Main Street to the Komatsu facility west of the I-75 in 2000. Firm capacity for the station was provided by a pair of 300 gpm, 40 HP end suction pumps. Fire service was provided using a single 1,050 gpm fire pump in the station. The city ceased operation of the Main Street station after acquiring the Center Road Tank and constructing a 16” pipeline on the west side of I-75 in 2012 between Center Road and Main Street. There has been

significant development along the Main Street corridor since the construction of the pump station in 2000. The pump station was adequate for the original zone in 2000, however, it is inadequate to serve the corridor now much less supply water to the 3 Million Gallon Center Road Tank.

The Main Street pump station is housed in a large well constructed building complete with a manually operated bridge crane. The building is in good condition and the pump station building is large enough to accommodate new pumps if the old pumps are removed and the piping replaced. One wall may need to be modified to install new pumps since the building was built around the pump station skid and the only provision for entry into the pump station is a standard door. The City may desire to electrify the bridge crane. Some foundation work may be required to support the new pumps. The electrical infrastructure is not adequate for the new pumps and will need to be replaced. New controls will be required.

We roughly estimate that one or two 2,200 gpm horizontal split case pumps will be required. Our estimate is based on:

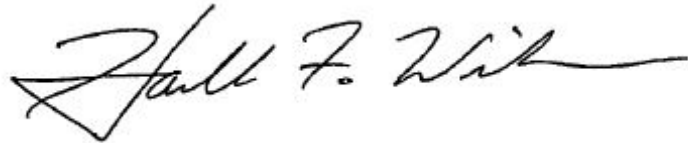
- Filling the 3 Million Gallon Center Road Tank in 24 hours
- A reasonable velocity in the 16" line supplying the tank.
- Consistency with adding an additional pump at Center Road.

The pump sizing (Horsepower, Pressure and Flow) will need to be refined during preliminary design.

We propose an engineering services budget of \$9,500 which will cover development of preliminary design options for the Main Street Pump Station and an opinion of cost for those options. We will discuss the options during development with your staff. This budget does not include the development of a system curve for the station; that work will need be performed by your hydraulic modelling consultant. This project will be covered under our demand services agreement with the City.

If this proposal is acceptable, please let us know at your earliest convenience and we will begin work immediately. We appreciate your consideration of our firm for these services. We look forward to working with you and your staff.

Sincerely,

A handwritten signature in black ink, appearing to read "Harold F. Wiedeman". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

WIEDEMAN AND SINGLETON, INC.

Harold F. Wiedeman
President

EMAIL ONLY