

Chatham Park Schedule 1 Water System Improvements

Town of Pittsboro – Update Meeting

July 21, 2015

Attendees

Fred Royal – Town of Pittsboro
John Poteat – Town of Pittsboro
Adam Pickett – Town of Pittsboro
Bryan Blake – M&C
Brian T. White – M&C

1. Project Scope – Water Line / Tank / Control Valve w/ Vault

Elevated Tank – Phase 1 is a 300,000 gallon multi leg tank. Town indicated they understood the tank to be a pedisphere/spheroid and have publicized this. Tank style needs to be addressed in Developer Agreement. This information will need to be determined for design.

Water Line – Town indicated their standards are ductile iron for all waterlines. 12” line to be located on south side of Suttles Rd. Whithers and Ravenel may need to make connection back to existing 16” by extending their 12” water line along Russet Run.

Control Valve w/ Vault – Underground vault with access hatch above ground. Electrical rack with power meter, RTU and antennae for telemetry. The valve will be a Cla-Val or Golden Anderson valve (size to be determined). The valve will have two controls; an open and closed function which will be controlled based on tank levels in the standpipe (with manual over ride function through SCADA) and a pressure reducing function that is hydraulically controlled locally so that the standpipe will not overflow and the pressure downstream of the valve is not too high. Valve type must be resistant to chloramines.

2. Existing 16-inch Water Line Location – SUE to locate

Town cannot confirm the location of the transition from 16-inch to 10-inch. NC DOT provided plans showing the relocation of the 10-inch pipeline at the 64 interchange but the plans do not include the 16-inch water line. It may have been installed later. It's believed by Town that the 16-inch line starts north of the Russet Run intersection. The new water line will need to connect to the existing 16-inch. McKim & Creed to field verify location using level A S.U.E. McKim & Creed to contact Junior (919-548-3253) from Town to meet S.U.E. crew to assist with location of 16-inch.

3. Coordination with Town – Easements and Access / Telemetry / Standards / Plan Review

16" Water Line north from Suttles Rd to tank will be placed in a utility easement to allow for maintenance access. There will also be a gravel driveway along the 16" water line to the tank for maintenance access and future construction access to the Phase II 1.0 MG tank.

The Town prefers manual controls for the water system. Adam agreed to have automated controls programmed for the open/close setting on the control valve. However, the level setting for the standpipe control should be a manually entered level by operator and the controls must have manual override to open/close anytime. M&C to contact the Town's SCADA integrator Randy Hare (910-476-4415) to discuss the SCADA equipment. M&C will design and spec the equipment at the control valve and tank site but the Town will need to have the information integrated into its current HMI at the WTP. The existing pumps at the WTP will remain as manual controls, but the design of the system is such that the pumps should be operated to fill the new 0.3 MG tank. Adam indicated he would also like to run pumps to send water into the other parts of town through the control valve. M&C to check the hydraulics of this operation but the new tank will likely need to have an altitude valve to ensure that it does not overflow when pumping into town.

The Town's SCADA hardware is provided by Custom Controls Unlimited in Raleigh. Contact is Devin Carrol. The Town's radio telemetry system is through Chatham Wireless and the contact is Scott.

The Town will need to have individual PRVs installed on all existing water services north of the proposed control valve prior to Phase I improvements being placed into service.

The Town needs to determine if they want to participate in raising the overflow elevation of the tank to support development in some higher elevations of Town. They do not seem to want to raise the height of the Phase I 300,000 gallon tank since this will be converted to reclaimed water, but they are still discussing the tank height for the 1.0 MG tank for Phase II. This should be addressed in the Development Agreement.

The Town indicated a concern regarding water age (quality) in the area of the existing Horton Tank. A new control valve located at the existing ground storage tank (1.0 MG) that would allow the Town to pump from the WTP and bypass the standpipe and ground tank could help reduce water age. Fred indicated that he would recommend to the Manager that this control valve for water quality be included in the Chatham Park project. M&C indicated that the water quality concern is an existing issue and the Chatham Development should not have to address since Chatham Park is not responsible for creating the issue. This should be discussed with Town Manager and included in Development Agreement.

4. Schedule – Basis of Design / Survey / Design & Permit / Bid & Award / Construction

Phase I water system improvements to be completed in approx. 2 years. (Summer 2017)
Construction will take approx. 15 months and should start in spring 2016. M&C is working to have permit drawings complete by the end of 2015. The Town will require site plan review for the Tank site. They indicated that we could 'fast track' the permit review and M&C can submit plans subsequent with other permit reviews to the State.