## **General Services**

- Field Survey
- All costs for a Subsurface Utility Engineering (SUE)
- Easement Documents (Easement plat per each). Hall County can utilize on-demand R/W acquisitions vendors to obtain any needed easements.
- All local and state permitting, if necessary
- Technical Specifications
- Contract documents
- Prepare Bid Packages
- Bidding Assistance
- Construction Administration
- Submittal Review
- Site inspection Allowance (suggest an amount that is hourly not to exceed or define number of assumed site visits or whether you want full time inspection)
- Construction Record Documents
  - As-Built drawings
  - SHP files to update Hall County GIS
  - Contract documents
  - Approved submittals
  - Correspondence including pay applications, change orders, RFIs, etc.

# Proposed Dove Point Pump Station

- Field Survey
- All costs for a Subsurface Utility Engineering (SUE)
- Station shall convey the Mulberry Creek Pump Station flow and be designed to serve the drainage basin. Additionally, the grinder pump station at the Fire Station will be abandoned and the flow will be directed to the new station.
- Coordinate with Spout Springs Phase 2 Forcemain utility designer.
- Engineering report
- Hydraulic Analysis
- Plans will include:
  - o Cover Sheet
  - Vicinity Map
  - o Site Plan
  - o Plan Detail
  - Lift Station Details including pump curves
  - Electrical site plan and one-line diagram
  - Miscellaneous Details
  - Erosion Control Plans
  - Erosion Control Details
- Lift station components
  - Flygt Submersible pumps and control panel
  - Variable Frequency Drives (VFDs)
  - Jib Crane or some lifting device to pull pumps <u>and</u> valves
  - Back-up pump with sound attenuation
  - Flow meter
  - SCADA integration

# Mulberry Creek Force Main

- Field survey
- Design an approximately 9,300 linear feet of 16-inch force main for the mulberry Creek PS to the existing 14-inch ductile iron force main at the Reunion Pump Station.
- You can define whether you want the force main in an easement or inside right of way
- All costs for a Subsurface Utility Engineering (SUE) Level B investigation for proposed route
- Review with Hall County conceptual route to discuss the requirement for easements

# Mulberry Creek Pump Station Modification

- The replacement of existing pumps with new Flygt dry pit submersible pumps sized to pump to the new Dove Point Pump Station, including discharge elbow and guide rail system, and modification or replacement of the power and control cable termination panels.
- One of the existing series pumps will remain in service as a back up to pump flow to Gainesville in case of a failure in the new pumping system.
- VFDs for each of the pumping units
- New pump control panel, including connection to the SCADA panel and associated configuration and PLC programming as required.
- Level control transducers in the wet well.
- Flow meter will be installed on the pump station discharge
- The pump station wet well will be modified to include an air mixing system.
- A vertical mechanical bar screen will be installed on the pump station influent.
- The chemical feed system will be modified if necessary for chemical treatment of the force main.

# **Reunion Pump Station Abandonment**

- With the Mulberry Creek Pump Station Modifications and the installation of the new force main the Reunion Development sewer will be redirected to the gravity sewer and the pump station will be abandoned.
- Plans should show removal of all surface infrastructure
- Plan should define how wet well will be decommissioned Below grade structures should be filled and holes should be drilled in the wet well to discourage settlement.
- Coordinate the return of any equipment to the County (pumps, valves, control panels, etc.)