



TASK ORDER #2023-005

**Pond Fork Basin Phase 1
Sewer Improvements**

Hall County , Georgia

Design and Construction Phase Services

Submitted to Hall County, Georgia
October 6, 2022, 2:00 PM

Prepared By:

CEC

CIVIL ENGINEERING CONSULTANTS, INC.

Civil & Environmental Engineering

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October 6, 2022

Mr. Mike Hawkins
Purchasing Department of the Hall County Commissioners
2875 Browns Bridge Road, 4th Floor
Gainesville, Georgia 30504

RE: Task Order Price Proposal– Task Order #2023-005 Design Services for the Pond Fork Basin Phase I Sewer Improvements.

Dear Mr. Hawkins:

Thank you for the opportunity to submit our cost proposal for the above referenced project. As you review our proposal, you will see that Civil Engineering Consultants, Inc. demonstrates both the desire and high-level expertise necessary to execute all aspects of the project outlined in the Task Order request.

We believe that our team possesses the technical talent, resources, industry-wide experience, and partnering skills necessary to assist the Hall County in achieving your goals and objectives for this project. It is important to note that our key personnel are duly licensed to practice engineering in the state of Georgia, thus we commit this team of experienced engineers and support staff to the success of this project. Members of our design team have visited the project site to review existing conditions. Additional site survey and coordination will be provided as necessary. We believe our approach provides Hall County with a cost effective approach for the Pond Fork Basin Phase I Sewer Improvements.

We thank you in advance for your thoughtful consideration. CEC is proud of our dedication to our clients, and of our record of accomplishments. We would be honored by the opportunity to work with you on this most important project.

Please feel free to contact me with any questions.

Very truly yours,



Andrew E. Lovejoy, P.E. President

CC: Mr. Bill Nash, P.E.

INTRODUCTION

The objective of this project is the preparation of plans and specifications with subsequent bidding and construction necessary for Pond Fork Basin Phase I Sewer Improvements.

CEC will use existing as-built plans with site survey to be performed as required to complete the plans for the project.

The design portion of the project will be completed by July 31, 2023 as outlined in the task order.

TEAM MEMBERS

Civil Engineering Consultants

Andrew E. Lovejoy, P.E.

Principal in Charge

Chuck Butterfield, P.E.

Project Manager

Purk Yotakhong, P.E.

Project Engineer

Ryan Honican, RLS

Surveyor

Chuck Butterfield will serve as lead professional. Chuck's GA P.E. registration number is GA31327.

CEC has 3 available professional engineers to work on your project. In addition, CEC has 3 technical staff members available.

PROJECT OWNER

Hall County, Georgia Department of Public Works

Mr. Bill Nash, P. E.

Asst. Director of Public Works and Utilities

Hall County Government 2875

Browns Bridge Road

PO Drawer 1435

Gainesville, Georgia 30504

SCOPE OF WORK

Our services are subdivided into the following categories:

Basic Services	
Category	Description
1	Survey
2	8 Inch Gravity Sewer
3	Pump Station
4	10 Inch Force Main
5	Easement Preparation

PROJECT ASSUMPTIONS

CEC takes no exception to the project assumptions in the RFP. A survey allowance of \$99,280 and an easement plats allowance of \$40,600 is included in CEC's not to exceed price.

PROJECT INITIATION PHASE

Project Plan: Develop a project schedule. At a minimum, the schedule shall include each of the work elements identified in each task of this Scope of Services.

Quality Control Procedures: Prior to submitting documents to the Hall County for review, a quality control review will be conducted of each submittal.

A kick-off meeting will be held with Hall County. Following the kick-off meeting, our team will perform a site visit.

Deliverables for the project initiation phase include:

- Kick-off meeting, agenda, and minutes
- Monthly progress reports
- Project Schedule

DATA COLLECTION

Under this section, CEC will perform the following key tasks.

- Accumulate and review applicable as-built plans, data, criteria, codes, standards, regulations, and other design guidelines.
- Develop requirements for Geotechnical Evaluation.
- Coordinate with owner selected Geotechnical Firm on test pit locations.
- CEC will perform survey work, as required to accommodate design requirements.

Geotechnical work will be performed by others. Geotechnical soils and testing services will be paid for by the Owner.

DESIGN

Our design will include 30-60-90% phases culminating final contract documents. Our design tasks include the following:

- Prepare detailed drawings for the utility relocation. Drawings provided in 22"x34" and reduced size.
- Prepare technical specifications in CSI format.
- Conduct review meetings at 30, 60 and 90% phase of design completion.
- Incorporate owner review comments.
- Prepare opinion of probable construction cost at 30, 60 and 100% stages of design.
- Perform CEC's Quality Control Procedures throughout the project.
- Coordinate with GDOT and GA EPD as required.
- Issue meeting minutes.
- Create contract documents using Engineers Joint Contract Committee (EJCDC) standards.
- Contract documents prepared at 100% will be "Bid Ready"

PERMITTING

CEC will assist in the preparation of permit application forms, if required, for the proposed utility construction and discuss the submittal requirements with each permitting agency. It is further assumed that CEC will support the Hall County Project Manager in acquiring a land disturbing permit, if required, as well as GDOT GUPS permitting.

As required, CEC will support Hall County during meetings with regulators such as Georgia DOT. CEC will obtain construction plan approval from the Georgia EPD, if required, prior to bidding.

EASEMENT ACQUISITION

CEC will prepare the necessary easement exhibit documents required to obtain the easements for the proposed improvements and aid the County as necessary in having the documents entered into the County records.

PROJECT SCHEDULE

- a. Notice to proceed to 30% drawings: 120 calendar days
- b. 30% drawings to 75% drawings: 90 calendar days
- c. 75% drawings to 100% drawings: < 60 calendar days

EXPERIENCE

The following project samples represent CEC’s relevant experience in recent water and wastewater projects. The descriptions for each of the projects include Owner references and contact information. CEC’s current design professionals involved in the following projects will be involved in any Hall County project.

CEC Relevant Distribution and Conveyance Systems Projects	Preliminary Engineering	Land Disturbance Permitting	Plans & Specifications	Bidding	Construction with Inspection	Construction Record Documents	Pump Evaluations	Instrumentation & Controls	Facility Optimization	Construction Management	Easement Acquisition
Bald Ridge Creek Pump Station (City of Cumming)	•	•	•	•	•	•	•	•	•	•	•
Holly Farm Pump Station (Cherokee WSA)	•	•	•	•			•	•			
Univeter Road Pump Station (Cherokee WSA)	•	•	•	•	•	•	•	•			
The Bluffs Pump Station (City of Canton)	•	•	•				•	•		•	
Clark Creek Pump Station (Cobb County)	•	•	•				•	•			•
Indian Creek Pump Station (Cobb County)	•	•	•				•	•			•
North x Northwest Gravity Sewer (Cobb County)	•	•	•							•	•
Sawmill Gravity Relief Sewer (City of Cumming)	•	•	•	•	•	•				•	•
Haw Creek Gravity Sewer and Force Main (City of Cumming)	•	•	•	•	•	•				•	•
Sweetwater Creek Pump Station (Paulding County)	•	•	•		•		•	•		•	
Olde Arcado Pump Station (Gwinnett County)	•	•	•		•	•	•	•		•	
Davis Street Pump Station and Force Main (Town of Braselton)	•	•	•				•	•			
Chateau Elan Pump Station and Force Main (Town of Braselton)	•	•	•				•	•			
Tribble Road Pump Station, Force Main and Gravity Sewer (City of Cumming)	•	•	•	•	•	•	•	•	•	•	•
Spot Road Pump Station, Force Main and Gravity Sewer (City of Cumming)	•	•	•	•	•	•	•	•	•	•	•
Park Shore Pump Station, Force Main and Gravity Sewer (City of Cumming)	•	•	•	•	•	•	•	•	•	•	•

Project Categories

Civil Engineering Consultants, Inc. (CEC) is grateful for the opportunity to submit this Proposal for Professional Design Services to Hall County for Pond Fork Basin Phase 1 Sewer Improvements. CEC's extensive experience is demonstrated by the projects described below.

Potential Services

Sanitary sewer lift station and pump station design – CEC has designed dozens of wastewater lift stations for municipalities throughout northeast Georgia, including the City of Cumming, City of Jefferson, Henry County Water Authority, Cartersville, Cherokee County Water and Sewerage Authority, City of Woodstock, Cobb County, Gwinnett County, Barrow County, Town of Braselton, Forsyth County, Douglasville Water and Sewerage Authority, City of Canton, and the City of Gainesville. CEC has designed approximately 25 lift stations in the past two years alone. Many stations also include force main design.

Sanitary sewer collection system design and construction – Using DIP, HDPE, PVC, and RCP, CEC has designed thousands of feet of pipeline ranging from 4-inch wastewater force mains to 42-inch raw water mains and 48-inch stormwater systems. These projects include both utility system expansion and rehabilitation of existing systems. Rehabilitations have included replacing gravity sewer in the same location as existing (which necessitated pumping around), installing new lines parallel with existing (while maintaining existing before abandoning), and rehabilitating DIP due to hydrogen sulfide gases.

Permitting services – CEC is proficient in providing all permitting services for local communities, EPD (both watershed protection branch and drinking water).

Surveying and site selection – In 2018, CEC acquired a survey firm to better serve clients with comprehensive services in a timelier manner. CEC has on staff three registered land surveyors. CEC provides survey services from project conception through construction record documents.

Easement plats and legal descriptions – CEC has been extremely active in the preparation of easement documents as well as assisting in acquiring them. CEC has worked with the same easement acquisition specialist for over 15-years. Additionally, CEC meets with property owners to discuss the technical aspects of projects and why the easement is necessary. With our survey services, CEC has the skill sets to do property research and provide the legal descriptions.

Construction management/inspection Services – For the past 36 years, CEC has managed all the City of Cumming's water, wastewater, and stormwater projects including water and wastewater plant upgrades and expansions, water and wastewater pump stations, water tanks, and all piping systems as well as other types of projects related to the utility department. CEC manages all projects from concept through construction record documents including scope definition, preliminary reports and engineering studies, subconsultants, contract procurement, advertising through Georgia Procurement, pre-bid meetings, pre-construction meetings, submittal review, pay application processing, construction record document creation. CEC has on staff two field inspectors, each with over 30-years' experience on all types of water and sewer infrastructure. Oversight can be full-time or periodic.

Completion of bid documents and response to bid questions – CEC always provides all bidding services to the City of Cumming as well as many private developers. Most other municipalities have their own procurement department. CEC works with contractors who will bid the project in the design phase to get feedback on costs and constructability to minimize surprises on Bid Day. Contractors appreciate the opportunity to get a preview of the project before it hits the street.

Site/civil engineering – CEC provides site/civil engineering in the context of water and sewer infrastructure projects like a water treatment plant or a pump station, etc.

Cultural and environmental resource identifications – CEC works with subconsultants to provide these services.

SCADA, electrical and other technical assistance – CEC works exclusively with our electrical engineering partner, ESAD, for all projects that require those services. Most communities have standardized on a SCADA integrator. CEC and ESAD will work with whomever Hall County has chosen.

Any other services requested by Hall County that falls under firm's scope – As an example of other services that could be of interest to Hall County, CEC has decades of experience working closely with the GDOT to relocate both City of Cumming water and sewer lines as part of road widening projects. Examples include widening Highway 20 from two to divided four lanes in two phases between Cumming and Gwinnett County, widening Highway 9 from two to divided four lanes, and currently Highway 20 between Cumming and Cherokee County from two lanes to six lanes. In addition to design work, CEC works diligently to get the GDOT to reimburse for all Costs to Cure (easement reimbursement, relocation costs, etc., for utilities in easements). CEC also has decades of experience preparing documents to obtain GUPS permits for state route crossings including Georgia 400, Highway 20, Highway 9 in Cumming, and other areas for other clients.

Maps and graphics unrelated to a specific project – CEC has a GIS Analyst on staff who regularly creates maps as part of sewer analyses for potential development specifically and the service area in general for Master Planning for the City of Cumming and Jefferson.

Easement or right-of-way acquisitions and any necessary plats, when related to a condemnation proceeding, or when multiple revisions are required due to owner negotiations – CEC has significant experience with easement and right of way acquisitions. The City of Cumming's previous administration was not adverse to using the power of eminent domain to expand its sewer system; CEC prepared the documents necessary to proceed.

Meetings requested by Hall County – CEC is available for meetings between Hall County and developers, Mayor and Council, GDOT, and other stakeholders. CEC's fiduciary duty will be to Hall County in discussions and negotiations with developers to maximize infrastructure contribution from them. The less developers pay for new infrastructure, the more your rate payers have to subsidize. CEC understands engineering is black and white. The elected officials operate in a world of gray and CEC understands how to navigate those circumstances.

Preparation of engineering surveys of the construction site to determine topography – CEC acquired a land surveying firm to meet client needs in a more timely fashion. With those survey services, CEC is capable of full site development.

Team Members

Civil Engineering Consultants

Andrew E. Lovejoy, P.E.

Principal in Charge

Chuck Butterfield, P.E.

Senior Design Engineer

Purk Yotakhong, P.E.

Senior Design Engineer

Mandy Ye, P.E.

Project Engineer

Victor Miller, P.E.

Project Engineer

Gina Moss, E.I.T.

Project Engineer

Pete McLeod

Sr. CAD Operator

Brian Dobbins, R.L.S.

Senior Surveyor

David Zimmer, P.E.

Electrical Engineering

Project Owners

City of Cumming, GA

Cartersville, GA

City of Jefferson, GA

Hall County, GA

Jackson County WSA, GA

City of Gainesville, GA

**Cherokee County Water
and Sewerage
Authority, GA**

City of Canton, GA

City of Woodstock, GA

Town of Braselton, GA

Gwinnett County, GA

Cobb County, GA

Project Period

1986-2022

Wastewater Pump Station Projects

PROJECT DESCRIPTION

Bald Ridge Creek PS Expansion • Cumming, Georgia • 2018-2021 • Project includes replacing an existing pump station on the same site from duplex 88-HP to triplex 130-HP pump, including standby back-up pumps.

Tribble Road Pump Station • Cumming, Georgia • 2021-2022 • This project included pump station civil, mechanical, and electrical design including 2,750 LF of 10-inch gravity sewer, 2,450 LF of 8-inch gravity sewer and 1,800 LF of 8-inch HDPE force main. The pump station was designed with a precast concrete wet well, 72 HP submersible pumps, and an on-site emergency standby pump. The station serves an approximately 573 acre sewershed including three new developments currently under construction.

Spot Road Pump Station • Cumming, Georgia • 2021-2022 • This project included pump station civil, mechanical, and electrical design including approximately 2,800 LF of 10-inch gravity sewer. The pump station was designed with a precast concrete wet well, 50 HP submersible pumps, and an on-site emergency standby pump. The station serves an approximately 425 acre sewershed including a new development off Spot R. currently under construction.

Holly Farm Pump Station • Cherokee County, Georgia • 2019-2021 • This project included pump station civil, mechanical, and electrical design for two pump stations, and 4 & 6-inch HDPE force main design and profiles for 1,050 LF and 7,900 LF to two discharge points. The pump stations were designed with fiberglass wet wells, 35 submersible HP and 11 HP pumps respectively, and on-site emergency generators serving a total of 202 residential units. This project also included CCWSA permitting and coordination.

Park Shore Pump Station • Cumming, Georgia • 2021-2022 • This project included pump station civil, mechanical, and electrical design including 5,200 LF of 12-inch gravity sewer, 1,400 LF of 8-inch gravity sewer, and 3,800 LF of 10-inch force main and pump station. The pump station was designed with a precast concrete wet well, 35 HP submersible pumps, and an on-site emergency standby pump. The station serves an approximately 450 acre sewershed including 501 new customers.

Davis Street Pump Station and Force Main • Braselton, Georgia • 2020-2021 • This project included pump station civil, mechanical, and electrical design, and 4-inch HDPE force main design and profiles for 3,455 LF to the discharge point. The pump station was designed with a precast concrete wet well, 11 HP submersible pumps, and an on-site emergency generator serving a residential development with 244 units. This project also included Town of Braselton coordination.

Chateau Elan Pump Station and Force Main • Braselton, Georgia • 2020-2021 • This project included pump station civil, mechanical, and electrical design, and 6-inch PVC C900 force main design and profiles for 2,210 LF to the discharge point. The pump station was designed with a precast concrete wet well, 26 HP submersible pumps, and an on-site emergency generator serving a residential development with 318 units. This project also included Towns of Braselton coordination.

