

TASK ORDER NO. 2

OWNER OF DRIPPING SPRINGS  
(OWNER)

AND

CAROLLO ENGINEERS, INC.  
(ENGINEER)

This Task Order is issued by the OWNER and accepted by ENGINEER pursuant to the mutual promises, covenants and conditions contained in the Agreement between the above named parties dated the 16<sup>th</sup> day of April, 2019, in connection with:

**City of Dripping Springs  
South Regional Water Reclamation Facility  
Planning, Design, Bid, and Construction  
(Project)**

**1.0 BACKGROUND**

The City of Dripping Springs has retained Carollo Engineers, Inc. to provide professional engineering services for planning, design, bid and construction phase services related to the South Regional Water Reclamation Facility (WRF) Expansion Project at the City of Dripping Springs' existing Wastewater Treatment Facility. The new WRF, when complete, will consist of two treatment trains that achieve biological nutrient removal (BNR), with tertiary filtration and chemical polishing for additional phosphorus removal, and ultraviolet (UV) disinfection.

**2.0 PURPOSE**

The purpose of this Task Order No. 2 is to establish the Engineering Services Budget for additional design services associated with the Project that were not anticipated when Task Order No. 1 was prepared. The project scope elements are described in detail in Section 4.0.

**3.0 PROJECT ELEMENTS**

The scope of services presented herein is based on a project that consists of the major elements summarized below:

1. Site Work, including general paving and grading improvements, and yard piping
2. Electrical design and tie-in with Influent Pump Stations (structural & mechanical design by others)
3. Headworks and flow split between the new and existing WRF trains
4. Packaged secondary treatment with Biological Nutrient Removal (BNR) and clarifiers
5. Packaged Tertiary Filters
6. UV Disinfection
7. Solids Handling, up to potential sludge thickening prior to sludge storage or use of a sludge box

8. Odor Control for Headworks, and Solids Handling as necessary
9. Plant Electrical and Controls
10. Electrical design and tie-In to Reclaimed Water Pump Station (structural & mechanical design by others)

#### **4.0 SCOPE OF SERVICES**

### **TASK 100 PROJECT MANAGEMENT AND MEETINGS**

#### **Task 101 – Project Management, Planning, Scheduling and Reporting**

##### **101.1 Additional Project Management and Coordination Efforts**

The project schedule under Task Order No 1 anticipated completion of the design by the first quarter of 2020. Due to circumstances in large part beyond Carollo's control, in particular delays due to the need to collect sample data to set design parameters and delays in obtaining survey and geotechnical data, the design schedule has been extended by over six months. Proportional hours for project management and coordination have been added to reflect a six-month extension of the schedule. Additional delays beyond six months have not been included.

### **TASK 200 QUALITY MANAGEMENT**

No additional budget is requested under this task.

### **TASK 300 SUBCONSULTANT SERVICES**

#### **Task 301 - Electrical Engineering**

ENGINEER has retained the services of SKE Engineering, Inc. to provide the electrical engineering and SCADA system design for this Phase I of the Regional Water Reclamation Facility Project. Additional scope and budget is requested under this task to cover SKE's design elements related to Phase II of the project (expansion of the current design to Interim II and Final Permit Phase flows). Please see the justification associated with Task 510.3.

### **TASK 400 PRELIMINARY DESIGN**

No additional budget is requested under this task.

### **TASK 500 FINAL DESIGN**

This final design task includes structural, civil, mechanical, and, as necessary, architectural components of the design of the project elements listed in Section 3.0. The additional budget requested under this Task Order No. 2 is will be tracked under Task 510 "Additional Design Services" and is based on additional design efforts that have largely already been expended, as follows:

**510.1 Additional Coordination for the Combined Headworks and Influent Lift Station Design**

When Task Order No. 1 was completed, a clear design delineation was anticipated between the influent lift station design (by CMA, contracted separately with the OWNER) and headworks design (by ENGINEER). The current design combines the headworks and lift station design into a single structure. This is anticipated to provide a better treatment solution for the OWNER overall, and result in significant construction cost savings, but required additional design elements by the ENGINEER and more detailed coordination with CMA than was anticipated under Task Order No. 1.

**510.2 Custom Structural Design for the Aeration Basins and Secondary Clarifier**

When Task Order No. 1 was completed, the design scope assumed a fully packaged secondary treatment system with metal basin walls provided by the equipment supplier, similar to the existing treatment plant at the site. During the course of the preliminary design, the ENGINEER agreed to change the design to concrete basin walls, which requires a full structural design of those basins by the ENGINEER and significant coordination with the packaged system suppliers, neither of which was anticipated in the prior scope. Concrete basin walls will provide a treatment system with a longer anticipated service life and a more tailored design for the OWNER's facility.

**510.3 Detailed Design Provisions for a Future Second Parallel Train**

The scope for Task Order No. 1 anticipated that the subsequent phases of the project would include a retrofit to the existing secondary treatment facilities, to be scoped and budgeted at a future time. Over the course of the design for the current project, the design team, in coordination with CMA and the OWNER, determined that the future flow (for Interim Phase II and Final Phase flows) would be treated at a new, second, parallel train located to the north of the current design. The existing treatment tank may still be reused as a sludge holding tank or aerobic digester, but given the age of this existing asset, a second new train identical to that being provided for the expansion will give OWNER the service life, operational performance, and maintenance benefits to meet its long term needs.

In order to avoid disruptions in operation of the Phase I WRF during construction of the Phase 2 parallel train, significant design progress for this future phase was required, including a preliminary site plan layout, sizing of future basins and equipment, establishing future electrical loads, and planning for electrical duct bank routing, yard piping, and site civil considerations. This progress represents a sizeable design effort and expense for which payment is requested as part of this task order. These costs are anticipated to significantly and directly reduce future design effort and cost.

**TASK 600 PERMITTING AND AGENCY COORDINATION (RESERVED)**

No additional budget is requested under this task.

**TASK 700 BID PHASE SERVICES**

No additional budget is requested under this task.

## **TASK 800 CONSTRUCTION PHASE SERVICES**

Construction phase services are being provided as part of a separate Task Order.

## **TASK 900 SPECIAL SERVICES**

Reserved.

### **6.0 TIME OF PERFORMANCE**

The additional design work contained within this Task Order No. 2 has largely already been completed. No additional changes to the design schedule are anticipated.

### **7.0 BUDGET**

OWNER and ENGINEER have established a not-to-exceed budget of **\$165,406.00** to complete all services under this Task Order No. 2. This amount will not be exceeded without a contract amendment.

OWNER will pay the ENGINEER on a lump sum basis for services identified in this Task Order No. 2. The budget for the updated Task 100, 300, and 500, broken down by subtask, are presented in Exhibit A. OWNER and ENGINEER agree to allow redistribution of funds between Tasks 100 through 500 as appropriate to allow flexibility in providing the needed services within the not-to-exceed budget.

ENGINEER agrees to complete these services for this amount unless the Budget is amended by OWNER and ENGINEER as a result of additional changes to the Scope of Work or Time of Performance.

### **8.0 EFFECTIVE DATE**

This Task Order No. 2 is effective as of the \_\_\_\_ day of \_\_\_\_\_, 2020.

IN WITNESS WHEREOF, duly authorized representatives of the OWNER and of the ENGINEER have executed this Task Order No. 2 evidencing its issuance by OWNER and acceptance by ENGINEER.

CAROLLO ENGINEERS, INC.

CITY OF DRIPPING SPRINGS

Accepted this \_\_\_\_ day of \_\_\_\_\_, 2020

By: \_\_\_\_\_  
Eva Steinle-Darling, PhD, PE  
Vice President

By: \_\_\_\_\_  
Bill Foulds, Jr., Mayor

By: \_\_\_\_\_  
Scott Hoff, PE  
Senior Vice President