

TASK ORDER NO. 2
RACINE WASTEWATER UTILITY
(OWNER)
AND
CAROLLO ENGINEERS, INC.

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 _____ day of _____, 2021, in connection with:

Racine Wastewater Utility WWTP UV Disinfection Replacement Project.

(Project)

PURPOSE

The purpose of this Task Order is to:

Perform UV disinfection replacement final design and bidding/award services (Phase II).

ENGINEER'S SERVICES

See Attachment A – Scope of Services

TIME OF PERFORMANCE

Services required by this Task Order shall be completed within 425 consecutive calendar days from the authorization to proceed.

PAYMENT

Payment to ENGINEER for services performed under this Task Order shall be based on the attached fee schedule (Attachment B) on a time and materials basis. The not-to-exceed limits of the ENGINEER's services shall be \$842,000.

EFFECTIVE DATE

This Task Order No. 2 is effective as of the ____ day of _____, 2021.

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.

OWNER

Accepted this ____ day of _____, 20__

By: _____
Associate Vice President

By: _____
Officer

By: _____
Vice President

ATTACHMENT A
SCOPE OF SERVICES
for the
Racine Wastewater Utility
WWTP UV Disinfection Replacement Project

Project Understanding

The Racine Wastewater Utility (Utility) plans to replace the existing Trojan UV4000 ultraviolet (UV) disinfection system at its Wastewater Treatment Plant (WWTP) due to aging infrastructure. The proposed new low-pressure, high-output (LPHO) system will be capable of disinfection of secondary effluent at average flows of 23.9 million gallon per day (MGD) and peak flows of 108 MGD. The UV system will be installed in a new UV Disinfection Building within the footprint of the existing effluent metering vault. The existing UV systems will be demolished and the existing UV buildings will be modified to serve as electrical buildings for the new UV equipment. The project also includes replacement of the existing flow meters and construction of a new effluent weir area covered with a canopy.

Carollo has prepared preliminary conceptual level drawings and a preliminary engineering report for this project. The final design, permitting, and bid phase services will progress the items included in the preliminary drawings to the bid advertisement level and produce specifications for bid, as well as support the Utility with associated permitting and bid phase services. It is anticipated that this scope of work will proceed beginning November 2021 and be completed by January 2023.

Project Approach

The scope of work is divided into the following phases, tasks, and subtasks, summarized below.

PHASE I - CONCEPTUAL AND PRELIMINARY DESIGN - COMPLETE

PHASE II - FINAL DESIGN AND BIDDING/AWARD

Task 1 - Project Coordination

Task 1.1 – Project Management, Coordination, and Reporting (14 months)

Invoices will be submitted monthly in accordance with the Utility's payment protocols. Each invoice will be submitted with a progress report detailing the work executed during the invoice period and work remaining.

Task 1.2 – Site Visits

Carollo will conduct up to two site visits to collect data and field verify information.

Task 1.3 – Bi-weekly Progress Calls

Carollo will conduct bi-weekly progress calls with Utility staff to provide project coordination and updates.

Task 1.4 – Geotechnical Analysis and Field Survey

Carollo will coordinate with a geotechnical subconsultant to produce an updated geotechnical report. This report will guide the structural design of the new UV building and demolition/modification of existing structures. This task will also include a field survey of the area surrounding and including the existing UV buildings, new UV building area, and effluent weir area.

Deliverables and Meetings

- Meetings
 - Bi-weekly Progress Calls (28 total)
 - Site Visits (2 total)
- Deliverables
 - Meeting/Workshop Agendas and Minutes (electronic)
 - Geotechnical Report (electronic)

Task 2 - Final Design Phase Services

Task 2.1 – Wet Weather Analysis

Carollo will refine the operational approach and design for peak wet weather flows based on additional collimated beam testing (one peak flow sample) and particle size distribution analysis.

Task 2.2 – Final Design Documents and EOPCC

Carollo will prepare design drawings to progress the design of the Project to the 60, 90 percent and ultimately bid advertisement completion levels. An estimated number of drawings to be provided is listed in the budget spreadsheet for reference. Selected drawings will be submitted at the 60 percent completion level with the full drawing submittal at the 90 percent and bid advertisement completion levels.

Carollo will prepare design specifications in CSI standard format. Selected specifications will be submitted at the 60 percent completion levels with full specification submittals at the 90 percent and bid advertisement completion levels. Carollo standard front-end documents will be utilized, which are based on the EJCDC format. Engineer's Opinion of Probably Construction Cost (EOPCC) in accordance with AACE criteria will be submitted at each completion level.

Design meetings will be held with the Utility at the 60 percent and 90 percent completion levels. The Utility will provide written comments and drawing markups to Carollo. Carollo will record the meeting minutes, comments received from the Utility and distribute to the attendees.

Deliverables and Meetings

- Meetings
 - 60% Design Review Meeting
 - 90% Design Review Meeting
- Deliverables
 - 60%, 90%, and 100% drawings and specifications
 - 60% and 90% documents
 - PDF format
 - Three half-size paper copies of drawings and three paper copies of specifications
 - 100% documents
 - PDF format
 - Three half-size paper copies of drawings and three paper copies of specifications
 - One signed and sealed full-size paper copy of drawings and specifications
 - 60%, 90%, and 100% EOPCC (electronic)
 - 60% and 90% Design Meeting Minutes (electronic)

Task 3 – Permitting Phase Services

Carollo will assist with the preparation and submittal of the following regulatory documents associated with the project. All permit fees will be paid by the Utility.

- WPDES general permit
- COJ Building permit
- Stormwater permit
- Clean Water Fund Program (CWFP) loan application in September 2022
- Focus on Energy incentives

As part of the assistance, Carollo will attend pre-meetings and meetings with the permit authorities as needed for necessary approval (assumed two meetings with WDNR and one with Focus on Energy).

Deliverables and Meetings

- Permit application packages
 - WPDES general permit application
 - COJ Building Permit application
 - CWFP Loan Application
 - Focus on Energy Incentive Application

Project Compliance and Funding Assumptions

- The Utility will pay for any applicable application or permit fees.

Task 4 – Bid Phase Services

Carollo will prepare a bidding notice, conduct bid-set sales, set-up a method for electronic distribution of the bid-set, and manage a plan-holders list. Carollo will attend a pre-bid meeting (virtual or in-person) to provide an overview of the project scope and requirements to potential bidders.

Carollo will document bidder questions and provide written responses to each question. Carollo will prepare up to two (2) addendums and distribute to plan-holders.

Once bids are all received, Carollo will prepare bid tabulations, review bids, conduct reference checks, and make a recommendation for award. Carollo will post bid tabulation results and prepare conformed documents following the bid.

Deliverables and Meetings

- Meetings
 - Pre-Bid Conference
- Deliverables
 - Bidding Notice
 - Pre-bid Meeting Agenda
 - Addendum(s) (pdf format)
 - Award Recommendation

Project Bidding Assumptions

- Utility will pay fees for advertising project for bidding
- Bidding period will last no longer than six (6) weeks

PHASE III - CONSTRUCTION PHASE SERVICES

Development of specific tasks and subtasks describing the scope of services for the Phase III work will be incorporated through subsequent amendment(s) to the Agreement.

**CAROLLO ENGINEERS, INC.
FEE SCHEDULE**

As of January 1, 2021

	<u>Hourly Rate</u>
Engineers/Scientists	
Lindsey Busch	\$200.00
Matt Sokolowski	145.00
Doug Wing	270.00
Bill Sotirakos	260.00
Andy Carroll	125.00
Ed Wicklein	240.00
Structural	240.00
EI&C	240.00
Technicians	
Technicians	145.00
Senior Technicians	197.00
Support Staff	
Document Processing / Clerical	100.00
Project Equipment Communication Expense (PECE) Per DL Hour	13.00
Other Direct Expenses	
Travel and Subsistence	at cost
Mileage at IRS Reimbursement Rate Effective January 1, 2021	\$.56 per mile*
Subconsultant	cost + 10%
Other Direct Cost	cost + 10%
Expert Witness	Rate x 2.0

This fee schedule is subject to annual revisions due to labor adjustments.