REQUEST FOR QUALIFICATIONS

Orange Water and Sewer Authority
Jones Ferry Road Water Treatment Plant Electrical Distribution Improvements, New Clearwell and Finish Water Pump Station
CIP Project No. 272-64
Issue Date: November 30, 2023

Submittal Deadline: January 24, 2024 at 2:00PM

1. INTRODUCTION

Your firm is hereby invited to submit a written statement of qualifications to provide professional engineering services for the Jones Ferry Road Water Treatment Plant (WTP) Electrical Distribution Improvements and New Clearwell project. OWASA will conduct a Qualification-Based Selection process to identify the best qualified firm, or team of firms, with which to negotiate a contract. All firms or teams submitting qualifications must have demonstrated experience and expertise in design and construction services for electrical systems and clearwells.

To be considered by OWASA, responses to this RFO must be received by 2:00PM Eastern Standard Time on Wednesday, January 24, 2024. Refer to Section 5 – Submittal Requirements for details.

2. OBJECTIVES

The primary objectives of the project are to:

Electrical Distribution Improvements:

a) Upgrade the electrical system (gear and equipment) by eliminating the existing 2300VAC system and shifting the entire WTP to 480VAC system.
b) Provide closed transition automatic transfer for both plant generators, including paralleling of the two generators.
c) Create redundant loop for main service feed and both plant generators.
d) Utilize previous planning and design documents for the electrical system improvements.
e) Coordinate with other capital projects and operations ongoing throughout the WTP.
f) Relocate components and demo existing “cube” power zone center.

New Clearwell and Finished Water Pump Station:

a) Design and construct a new clearwell and Finish Water Pump Station (FWPS) to meet the 20 MGD rated capacity and redundancy and resiliency needs of the WTP operations, with the ability to expand to 30 MGD in the future.
b) FWPS to may include electrical room that could include relocated components from the existing “cube” power zone center.

c) Incorporate ancillary systems like backwash pumping, as necessary, into the new clearwell and FWPS designs and construction.

d) Utilize previous planning documents for the clearwell and conceptual 30 MGD facility site layout as a starting place.

e) Coordinate with other capital projects and operations ongoing throughout the WTP.

3. BACKGROUND AND DESCRIPTION

Electrical Distribution Improvements:

In 2013, OWASA retained the services of Hazen & Sawyer (H&S) to complete an evaluation of the WTP switchgear for automatic transfer to standby power generators. The results of the H&S evaluation focused on identifying options that would provide WTP the ability to automatically transfer to back-up generator power in the event of a loss of the main electrical utility service to the plant. From this report, OWASA completed a short-term option recommended by H&S; however, the H&S report had identified a long-term solution to eliminate the 2300VAC service, shift the plant’s entire electrical service to 480VAC, and provide a closed transition automatic transfer to both generators.

In 2018, OWASA retained the services of CH2MHill to complete a Reliability and Risk Assessment of the WTP to identify potential improvements to mitigate risk of a system failure. One of the highest priority projects identified by this assessment was the removal of the 2300VAC gear and equipment and conversion over to 480VAC.

In 2021, OWASA retained AECOM to design and construct the replacement of Finish Water Pump (FWP) No. 5, which removed the remaining piece of process equipment operating on the 2300VAC system.

In 2019, OWASA retained H&S to complete the evaluation and design of the electrical distribution system improvements. In 2021, Hazen completed what was considered to be a 100% design submission for the scope that was envisioned at that time. The new electrical distribution system design includes a new electrical building and duct banks, coordination with Duke Energy to replace the existing electrical service with new 480VAC transformer, and included extensive investigation into and planning for the replacement of localized electrical panels across the entire WTP. In conjunction with the design process, OWASA and H&S submitted multiple applications seeking SRF funding but were not selected and after three attempts OWASA chose to pursue other funding sources. OWASA would have moved forward with the plans as previously developed, but in 2022 it was determined that the existing clearwell was facing significant structural failures/challenges requiring near-term construction of a new clearwell, and this impacted the ability for the electrical distribution improvements project to continue as originally designed.

This project will focus on taking the existing H&S drawings and reevaluating the electrical routing, need to relocate the generator building, and coordinating the additional needs of a new clearwell,
finished water pump station, and a future per- and polyfluoroalkyl substances (PFAS) removal facility (discussed below in “Other Challenges Concurrent at the WTP”). Significant coordination is expected with the PFAS project which is planned to occur within the same time period as the design and construction of the electrical system upgrades (and the new clearwell discussed below), however, it is OWASA’s intention to utilize as much of the previous work by H&S as possible.

**New Clearwell:**

The WTP has a single 1.5-million-gallon clearwell partially buried, cast-in-place concrete tank constructed circa 1948. In 2019, OWASA executed an agreement with H&S to perform a clearwell inspection both above and below the water line. At this time, the clearwell walls and foundation were noted in generally good condition, with some concerns about cracking and leakage in the roof slab in high stress areas where rebar was exposed. Additionally, some corrosion and tuberculation was noted with some piping throughout the clearwell.

As a result of the inspection, OWASA retained H&S to evaluate and design a rehabilitation needs for the existing clearwell – focusing on the clearwell roof and potential locations of leakage. This project was part of a larger initiative that also included a rapid mix evaluation.

In 2022, as part of the rehabilitation project, H&S reinspected the clearwell. The corrosion of exposed rebar in the underside of the clearwell roof had exponentially increased since the previous inspection and due to the extent of rehabilitation needed and the risk to plant operations, H&S recommended designing and constructing a new clearwell.

In the meantime, H&S also recommended OWASA work to rehabilitate and stabilize the current structural concerns associated with the existing clearwell. OWASA is working with H&S on the design to stabilize the existing clearwell. It is anticipated that this stabilization work will be complete by 2024 and should provide continued use of the existing clearwell for another three to five years. As such OWASA plans to have a new clearwell and FWPS online by 2029. The design and construction of the new clearwell and FWPS is urgent and a high priority for the OWASA.

This project will focus on taking the past clearwell studies and the conceptual 30 MGD site layout and adjusting it to locate and design and construct a 20 MGD clearwell with the ability to expand to 30 MGD in the future. The future clearwell must allow for redundancy and resiliency for operations, whether within a single structure or with multiple structures. Significant coordination is expected with the PFAS project which is planned to occur within the same time period as the design and construction of the new clearwell, FWPS, and the electrical system improvements (discussed above). Yard piping, ancillary systems, maintenance of plant operations, site constraints, and staffing will be of the utmost importance during the coordination efforts.

**Other Challenges Concurrent at the WTP:**

OWASA will have other projects in design and construction concurrently with the electrical distribution improvements and the new clearwell, most notably new PFAS treatment facilities.
This project will require significant coordination between other consultants or consultant teams and contractors, as well as OWASA. OWASA WTP staff must be able to perform their normal day-to-day responsibilities, while still participating in the design and construction processes for the various projects. OWASA may entertain on-site consultant or consultant team representation to ensure this project runs smoothly and has appropriate resources. Additionally, space for onsite office trailers and contractor storage will be a challenge and allocation of space between the projects will be a critical planning and coordination detail. OWASA expects that a portion of this project will be to coordinate with the PFAS designer (or design team) to provide reasonable solutions and support for these efforts.

A draft timeline of the projects concurrent at the WTP is shown below:

Please note that this schedule is subject to change to either accelerate or decelerate the clearwell, FWPS, and electrical design and construction relative to the needs of the planned PFAS project.

4. SCOPE OF SERVICES

The engineering services required for this project are expected to be completed to meet the objective outlined above and in general accordance with a scope of services as needed to accomplish the tasks listed below. **However, the final scope of services will be negotiated with the selected engineering firm and may include modified and/or additional tasks.**

**Electrical System Improvements:**

1. Design services may include:
   a. Evaluation of existing plans for new route alternatives away from the existing clearwell
   b. Final design of electrical system improvements
   c. Re-permitting of final design
   d. Review and update previous maintenance of operations planning
   e. Review and update construction contract documents and technical specifications
   f. Updated cost estimation
Request for Qualifications
Electrical Distribution Improvements and New Clearwell
November 30, 2023

2. Construction services may include*:
   a. Construction inspection
   b. Construction administration
   c. Assistance with stakeholder engagement and communications
   d. Preparation of Record Drawings and other closeout information

New Clearwell and Finished Water Pump Station:

1. Planning services may include:
   a. Preliminary engineering / alternatives evaluation
   b. Risk, operations engagement, planning

2. Design services may include:
   a. Design and permitting
   b. Maintenance of operations planning
   c. Development of construction contract documents and technical specifications
   d. Cost estimation
   e. Bid assistance, potentially including contractor prequalification

3. Construction services may include*:
   a. Construction inspection
   b. Construction administration
   c. Assistance with stakeholder engagement and communications
   d. Preparation of Record Drawings and other closeout information

*Please note that at the time of this RFQ, OWASA anticipates bidding the clearwell and electrical project as one construction project.

The draft and final plans, reports, etc. will be provided in electronic and hard copy formats in a manner acceptable to and usable by OWASA. The actual list and format of deliverables will be negotiated with the selected firm.

5. SUBMITTAL REQUIREMENTS

A mandatory pre-submittal meeting will be held on December 20, 2023 at 11:00AM at 400 Jones Ferry Road, Carrboro NC.

Responses to this RFQ must be received by OWASA no later than 2:00PM. Eastern Time on Wednesday, January 24, 2024. To be considered, please submit four (4) hard copies and one (1) electronic copy in PDF format of the required qualifications to:

Vishnu Gangadharan
Director of Engineering & Planning
Orange Water and Sewer Authority
400 Jones Ferry Road  
Carrboro, North Carolina 27510

Submittals (including resumes) shall be limited to a maximum of 10 double-sided pages (i.e., 20 pages printed double-sided onto 10 sheets of 8-1/2”x11” paper). Please note that all Submittals shall become public documents upon delivery to OWASA. If there is sensitive or confidential information that cannot be shared publicly, please include additional documentation along with your submittal.

Each submittal must include the following in order to be considered:

a) **Project Team/Org Chart [25 points]** showing the proposed project team members, including sub-consultants (if any), identifying their respective roles on the project, and indicating their availability to support this project. Each proposal shall include resumes of key team members. The primary contact shall be clearly identified.

b) **Project Approach [25 points]** describing your proposed approach to accomplish the work to meet the project objectives, identifying how you will manage any notable risks to meeting the schedule and budget constraints. Provide detailed information that will allow OWASA staff to distinguish your team from other firms that may be competing for this project.

c) **WTP Projects Coordination Approach [10 points]** for other projects at the WTP that will occur concurrently with the Clearwell and Electrical Improvements Project. Describe your approach for coordinating with other consultants, teams, and contractors and supporting OWASA staff and OWASA operations.

d) **Project Schedule [20 points]** time is of the utmost importance; describe how your project team plans to meet the above schedule and identify any risks and mitigation of those risks.

e) **Past Experience and References [20 points]** for the five (5) most similar projects completed by your project team in the last ten (10 years for other clients. Identify who served as project manager and key lead technical roles in those projects.

f) **Contract Objections:** It is OWASA’s intention to use a contract similar to the one included as Attachment 1. If your firm objects to any element of the contract, please state the objections in the submittal.

### 6. SELECTION PROCESS

OWASA intends to select a firm on a qualifications basis within three weeks of receiving the responses to this RFQ, and expects to complete final scoping and contract negotiation by mid-March 2024. OWASA reserves the right to reject any and all proposals, to waive any and all formalities, and to disregard all nonconforming or conditional submittals.

OWASA may elect to conduct face-to-face interviews with two or more firms or teams being evaluated prior to making a final selection.

If OWASA cannot reach an agreement with the initially selected firm, OWASA will then proceed to negotiate with other firms that submitted qualifications, or will reissue the RFQ.
7. **OWASA POINT OF CONTACT**

Vishnu Gangadharan will be OWASA’s primary point of contact for all consultant selection matters relating to this project. **All questions regarding this Request for Qualifications must be emailed on or before Thursday, January 18, 2024** to Mr. Gangadharan at vgangadharan@owasa.org.

8. **SUPPLEMENTAL INFORMATION**

The following information will be made available upon email request to vgangadharan@owasa.org:

a. CH2M Hill Reliability and Risk Assessment Report  
b. OWASA WTP FMEA Mitigation FINAL-Electrical Distribution  
c. AECOM Finished Water Pump No. 5 Replacement Preliminary Engineering Report  
d. Hazen and Sawyer Jones Ferry Rd WTP Electrical Improvements PER  
e. Hazen and Sawyer WTP Electrical Distribution Improvements Drawings12102021  
f. Hazen and Sawyer WTP Electrical Distribution Improvements Specifications12102021  
g. Risk Register - WTP Electrical Distribution Improvements  
h. WTP Clearwell Schematic Size and Location

Note that a **Sensitive Information Request Form** must be submitted with the request for any of the supplemental information documents.
AGREEMENT
BETWEEN

ORANGE WATER AND SEWER AUTHORITY,

a political subdivision of the State of North Carolina, its successors and assigns, hereinafter referred to as “Owner” through its Board of Directors,

and

{CONSULTANT NAME}

its successors and assigns, hereinafter referred to as “Consultant”

IN ORANGE COUNTY NORTH CAROLINA

FOR
CONSULTING SERVICES

W I T N E S S E T H :

WHEREAS, Owner intends to design electrical distribution improvements and a new clearwell at the Jones Ferry Road Water Treatment Plant;

WHEREAS, Owner requires certain consulting services in connection with the project (the Services); and,

WHEREAS, Consultant is prepared to provide the Services;

NOW THEREFORE, in consideration of the mutual terms and conditions, promises and payments contained in this Agreement, Owner and Consultant agree as follows:

ARTICLE 1 - TIME FOR PERFORMANCE

1.1 The effective date of this Agreement is ______________ and shall remain in effect until terminated. Consultant shall perform the services described in Attachment B (herein, the Project Scope of Services) to this Agreement. Owner will issue a separate Notice to Proceed for the work, and the work shall proceed according to the schedule as described in the Project Scope of Services. Any work initiated by Consultant prior to the Owner’s written authorization of the Project will be at the Consultant's sole risk.

ARTICLE 2 - GOVERNING LAW

2.1 This Agreement shall be governed by the laws of the state of North Carolina. Any disputes which may arise out of this agreement shall be filed in the North Carolina Court of Justice, The Superior Court of Orange County NC.

ARTICLE 3 - SERVICES TO BE PERFORMED

3.1 Consultant shall perform the Services described in the Project Scope of Services as authorized
under this Agreement. Consultant shall provide all services as set forth in the Project Scope of Services, including the necessary, incidental and related activities and services required and contemplated in the Consultant's level of effort.

3.2 Consultant and Owner acknowledge that the Scope of Services described for the Project does not delineate every detail and minor work task required to be performed by Consultant to complete the work authorized by the Scope of Services. If during the course of the performance of the services authorized by this Agreement, Consultant determines that work should be performed to complete the Project which is in the Consultant's opinion outside the level of effort originally anticipated, whether or not the Project Scope of Services identifies the work items, Consultant shall notify Contract Administrator in writing within 30 days and wait for Owner approval before proceeding with the work. If Consultant proceeds with said work without notifying the Contract Administrator, said work shall be deemed to be within the original level of effort described in the Project Scope of Services. Notice to the Contract Administrator does not constitute authorization or approval by Owner to perform the work. Performance of work by Consultant outside the originally anticipated level of effort without prior written Owner approval is at the Consultant's sole risk.

3.3 Upon mutual written agreement, the Project Scope of Services may be modified. The Owner and the Consultant may negotiate additional scopes of services, compensation, time of performance and other matters related to the project. If the Owner and Consultant cannot contractually agree, Owner shall have the right to immediately terminate negotiations at no cost to the Owner and to procure services from another source.

ARTICLE 4 - OWNER'S RESPONSIBILITIES

4.1 Owner shall be responsible for all matters described in the Project Scope of Services (Attachment B).

ARTICLE 5 - COMPENSATION AND METHOD OF PAYMENT

5.1 Owner agrees to pay Consultant as compensation for performance of services as described in the Project Scope of Services. Compensation may be as a lump sum or as maximum amount not-to-exceed. The maximum amount not-to-exceed method of compensation will utilize hourly billing rates established as part of this Agreement.

5.2 Consultant shall separately invoice for services rendered each month. Each project invoice shall reflect percentage of work completed to date and for the invoiced month. Invoices shall provide a detailed breakdown of hours worked, hourly billing rates by each individual, and the expenses attributable to the project during the period.

5.3 The Owner shall assign a Project CIP Number, as well as a Purchase Order Number for the Project to facilitate internal contract administration. Each Project Invoice must reference the assigned CIP Number and the Purchase Order Number for the Project and be sent directly to the Owner’s Project Manager as assigned. Payment terms shall be the net invoice amount within 30 days.

5.4 The hourly billing rates for this agreement are set forth in Attachment A to this agreement and shall be used for maximum not-to-exceed compensation.
5.5 The reimbursable expenses for this agreement are set forth in Attachment A to this agreement and shall be used for maximum amount not-to-exceed compensation. Consultant shall be allowed to adjust expense items in accordance with changes in IRS criteria for deductible expenses.

5.6 Consultant shall keep such records and accounts and require any and all consultants and sub-consultants to keep records and accounts as may be necessary in order to record complete and correct entries as to personnel hours charged to the project and any expenses for which Consultant expects to be reimbursed. All books and records relative to the project shall be available at all reasonable times for examination and audit by Owner and shall be kept for a period of three (3) years after completion of all work pursuant to this Agreement. Incomplete or incorrect entries in such books and records shall be grounds for Owner's disallowance of any fees or expenses based upon such entries.

ARTICLE 6 - STANDARD OF CARE

6.1 General: Consultant shall exercise the same degree of care and diligence in the performance of the Services as is ordinarily exercised by a professional serving under similar circumstances.

ARTICLE 7 - LIABILITY AND INDEMNIFICATION

7.1 General: Having considered the potential liabilities that may exist during the performance of the Scope of Services, the benefits of the project, and the Consultant's fee for the Services, and in consideration of the promises contained in this Agreement, Owner and Consultant agree to allocate and limit such liabilities in accordance with this Article.

7.2 Indemnification by Consultant: Consultant agrees to defend, indemnify, and hold harmless Owner, its agents, and its employees from and against legal liability for all claims, losses, damages, and expenses to the extent such claims, losses, damages, or expenses are caused by Consultant's negligent acts, errors, or omissions.

7.3 Employee Claims: Consultant shall indemnify Owner against legal liability for damages arising out of claims by Consultant's employees to the extent such claims arise out of Consultant's negligent acts, errors or omissions.

7.4 Survival: Upon completion of all Services, obligations, and duties provided for in this Agreement, or if this Agreement is terminated for any reason, the terms and conditions of this Article shall survive.

ARTICLE 8 - INSURANCE

8.1 During the performance of the Services under this Agreement, Consultant shall maintain the minimum levels of insurance shown below and provide certificates of such coverage to Owner prior to performance. All policies must provide ten (10) days advance written notice to Owner in the event of cancellation, expiration, or alteration.

8.1.1 General Liability Insurance, with a combined single limit of $1,000,000 for each occurrence and $1,000,000 in the aggregate.

8.1.2 Automobile Liability Insurance, with a combined single limit of $1,000,000 for each person and $1,000,000 for each accident.
8.1.3 Workers' Compensation Insurance in accordance with statutory requirements and Employers' Liability Insurance, with a limit of $500,000 for each occurrence.

8.1.4 Professional Liability Insurance, with a limit of $1,000,000 annual aggregate.

ARTICLE 9 - OWNERSHIP OF DOCUMENTS AND INTELLECTUAL PROPERTY

9.1 Except as otherwise provided herein, documents and reports prepared by Consultant as part of the Services shall become the property of Owner upon payment for same. All finished or unfinished documents, data studies, surveys, drawings, maps, models, photographs and reports prepared or provided by Consultant in connection with this Agreement become the property of the Owner, whether the projects are completed or not, and shall be delivered by Consultant to the Owner within ten (10) days after receipt of written notice and upon payment for same. Consultant shall retain its rights to its specifications, databases, computer software, and other proprietary property. Rights to intellectual property developed, utilized, or modified in the performance of the Services shall remain the property of Consultant. Any use by Consultant of intellectual property owned by Owner is authorized solely for the project.

ARTICLE 10 - TERMINATION

10.1 This Agreement may be terminated by either party upon written notice in the event of substantial failure by the other party to perform in accordance with the terms of this Agreement. The nonperforming party shall have fifteen calendar days from the date of the termination notice to cure or to submit a plan for cure acceptable to the other party.

10.2 Owner may terminate or suspend performance of this Agreement for Owner's convenience upon written notice to Consultant. Consultant shall terminate or suspend performance of the Services on a schedule acceptable to Owner. If termination or suspension is for Owner's convenience, Owner shall pay Consultant for all the Services performed and termination or suspension expenses. Upon restart, an equitable adjustment shall be made to Consultant's compensation.

ARTICLE 11 - DELAY IN PERFORMANCE

11.1 Neither Owner nor Consultant shall be considered in default of this Agreement for delays in performance caused by circumstances beyond the reasonable control of the nonperforming party. For purposes of this Agreement, such circumstances include: floods; earthquakes; fire; epidemics; war, riots, and other civil disturbances; strikes, lockouts, and other labor disturbances; sabotage; judicial restraint; and the inability to procure permits, licenses, or authorizations from any local, state, or federal agency for which such permits have been properly applied for in accordance with the specified Project Schedule for any of the supplies, materials, accesses, or services required to be provided by either Owner or Consultant under this Agreement.

11.2 Should such circumstances occur, the nonperforming party shall, within a reasonable time of being prevented from performing, give written notice to the other party describing the circumstances preventing continued performance and the efforts being made to resume performance of this Agreement. Consultant shall be entitled to an equitable adjustment in schedule and compensation in the event such circumstances occur.
ARTICLE 12 - COMMUNICATIONS

12.1 Any communication required by this Agreement shall be made in writing to the address specified in the Project Scope of Services. The Contract Administrator for the Owner shall be specified in the Project Scope of Services. Nothing contained in this Article or the Project Scope of Services shall be construed to restrict the transmission of routine communications between representatives of Owner and Consultant.

ARTICLE 13 - WAIVER

13.1 No waiver by either Owner or Consultant of any breach of this Agreement shall be of any effect unless it shall be written and signed by the waiving party. Such a waiver shall not affect the waiving party's rights with respect to any other or further breach.

ARTICLE 14 - SEVERABILITY

14.1 The invalidity, illegality, or unenforceability of any provision of this Agreement, or the occurrence of any event rendering any portion or provision of this Agreement void, shall in no way affect the validity or enforceability of any other portion or provision of this Agreement. Any void provision shall be deemed severed from this Agreement, and the balance of this Agreement shall be construed and enforced as if this Agreement did not contain the particular portion or provision held to be void. The parties further agree to amend this Agreement to replace any stricken provision with a valid provision that comes as close as possible to the intent of the stricken provision. The provisions of this Article shall not prevent this entire Agreement from being void should a provision which is of the essence of this Agreement be determined void.

ARTICLE 15 - SUCCESSORS AND ASSIGNS

15.1 Owner and Consultant each binds itself and its directors, officers, partners, successors, executors, administrators, assigns, and legal representatives to the other party to this Agreement and to the directors, officers, partners, successors, executors, administrators, assigns, and legal representatives of such other party in respect to all provisions of this Agreement.

ARTICLE 16 - ASSIGNMENT

16.1 Neither Owner nor Consultant shall assign any rights or duties under this Agreement without the prior written consent of the other party. Unless otherwise stated in the written consent to an assignment, no assignment will release or discharge the assignor from any obligation under this Agreement. Nothing contained in this Article shall prevent Consultant from employing independent consultants, associates, and subcontractors to assist in the performance of the Services. Consultant will not employ subcontractors for the performance of the Services without the prior written approval of Owner, which approval shall not be unreasonably withheld. Consultant shall have the right to assign duties to any of Consultant’s related or affiliated companies.

ARTICLE 17 - THIRD PARTY RIGHTS

17.1 Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than Owner and Consultant.

ARTICLE 18 - MISCELLANEOUS
18.1 INTERPRETATION: The language of this Agreement has been agreed to by both parties to express their mutual intent and no rule of strict construction shall be applied against either party hereto. The headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement. All personal pronouns used in this Agreement shall include the other gender, and the singular shall include the plural, and vice versa, unless the context otherwise requires. Terms such as “herein,” “hereof,” “hereunder,” and “hereinafter” refer to this Agreement as a whole and not to any particular sentence, paragraph, or section where they appear, unless the context otherwise requires. Whenever reference is made to a Section or Article of this Agreement, such reference is to the Section or Article as a whole, including all of the subsections of such Section unless the reference is made to a particular subsection or subparagraph of such Section or Article.

18.2 CONSULTANT’S STAFF: Consultant shall provide the key staff identified in their proposal for the Project as long as said key staff are in Consultant's employment.

18.2.1 Consultant will obtain prior written approval of Contract Administrator to change key staff members. Consultant shall provide Contract Administrator with such information as necessary to determine the suitability of proposed new key staff. Contract Administrator shall be reasonable in evaluating key staff qualifications.

18.2.2 If Contract Administrator desires to request removal of any of Consultant's staff, Contract Administrator shall first meet with Consultant and provide reasonable justification for said removal.

18.3 ENTIRE AGREEMENT: This Agreement, including all documents identified below, represents the entire understanding between the Owner and the Consultant as to this particular scope of work and shall supersede all prior and contemporaneous communications, representations, understandings, and Agreements relating to the subject matter hereof and may be amended only by written mutual Agreement of the parties.

18.4 ATTACHMENTS: Current listing of Attachments includes:

- Attachment A – Hourly Billing Rates and Reimbursable Expenses.
- Attachment B – Project Scope of Services.

ARTICLE 19 – PRE-EXISTING CONTAMINATION

19.1 Anything herein to the contrary notwithstanding, title to, ownership of, and legal responsibility and liability for any and all pre-existing contamination shall at all times remain with Owner. “Pre-existing contamination” is any hazardous or toxic substance, material, or condition present at the project site or sites concerned which was not brought onto such site or sites by Consultant.

ARTICLE 20 – LIMITATIONS OF RESPONSIBILITY

20.1 Consultant shall not be responsible for: (1) construction means, methods, techniques, sequences, procedures, or safety precautions and programs in connection with the Project; (2) the failure of any contractor, subcontractor, vendor, or other participant, not under contract to Consultant, to fulfill contractual responsibilities to Owner or to comply with federal, state, or local laws, regulations, and codes; or (3) procuring permits, certificates, and licenses required for any
construction unless such responsibilities are specifically assigned to Consultant in Scope of Services.

ARTICLE 21 – NON DISCRIMINATION CLAUSE

21.1 The Consultant shall not discriminate against any person on the grounds of race, color, national origin, sex, age, or handicap in administration of this Agreement. Nor shall any person be excluded from participation in, or be denied the benefits of any project designed under this Agreement on the grounds of race, color, national origin, sex, age, or handicap.

ARTICLE 22 – MINORITY BUSINESS PARTICIPATION

22.1 It is the policy of OWASA to provide minority businesses an equal opportunity to participate in all aspects of OWASA’s contract activities. Consultant shall comply with OWASA’s Minority Business Participation Outreach Plan and Guidelines.

ARTICLE 23 – E-VERIFY

23.1 Consultant shall comply with the requirements of Article 2 of Chapter 64 of the General Statutes. Further, if Consultant utilizes a subcontractor, Consultant shall require the subcontractor to comply with the requirements of Article 2 of Chapter 64 of the General Statutes.
IN WITNESS WHEREOF, Owner and Consultant have executed this Agreement.

OWNER:
ORANGE WATER AND SEWER AUTHORITY

BY: ________________________________
TITLE: ______________________________
DATE: ______________________________

CONSULTANT:
{CONSULTANT NAME}

BY: ________________________________
TITLE: ______________________________
DATE: ______________________________

APPROVED AS TO FORM AND LEGALITY:

________________________    _____________________________
Date           Robert Epting, Esquire
Authority General Counsel

This instrument has been pre-audited in the manner required by the Local Government
Budget and Fiscal Control Act:

________________________
Date                      Stephen Winters
Director of Finance and Customer Service
ATTACHMENT A

HOURLY BILLING RATES AND REIMBURSABLE EXPENSES

INTRODUCTION
The hourly billing rates are set forth below.

<table>
<thead>
<tr>
<th>Billing Category</th>
<th>Individual Name and Title</th>
<th>Hourly Billing Rate for the Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Project Manager</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Discipline Engineer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Manager</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Engineer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering Associate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Technician</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technician</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative Assistant</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

BILLING CATEGORY DEFINITIONS

The following table provides broad definitions for various Billing Categories. As a guideline, expected experience and duties for each of the categories have been included in the Billing Category Definitions. It is expected that in some instances the actual experience of an individual may be different than what is required for the corresponding Billing Category. In all such cases, Consultant will provide appropriate justification and seek approval from the Owner.

<table>
<thead>
<tr>
<th>Principal</th>
<th>This is the firm’s corporate officer. In some cases “Principal” may be the owner or one of the partners of the firm, and is generally in a position to make all the corporate level decision for the firm as it pertains to this Agreement.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Project Manager</td>
<td>Person in this position provides senior level project management, provides high level of professional input for the project and is generally responsible for conducting high level project review. This person has a Professional Engineering license in North Carolina and professional-level experience of over 15 years.</td>
</tr>
<tr>
<td>Role</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Senior Discipline Engineer</td>
<td>Person in this position is considered the firm’s expert for a particular discipline. This person will oversee Engineering work of particular discipline at the highest level for the firm. This person has a Professional Engineering license in North Carolina and professional-level experience of over 18 years. Engineering Disciplines may include, but are not limited to: Structural Engineering, Water Resources, Environmental Engineering, Transportation, Electrical Engineering, Mechanical Engineering, Pump Station Design, Instrumentation and Control, Construction Management, Power Generation, etc.</td>
</tr>
<tr>
<td>Project Manager</td>
<td>Person in this position provides day-to-day Project Management for the Project and acts as the key client contact. This person has a professional license in North Carolina and professional-level experience of over 8 years.</td>
</tr>
<tr>
<td>Project Engineer</td>
<td>Person in this position provides day-to-day engineering work for various disciplines as required by individual projects. This person has a professional license in North Carolina and professional-level experience of over 8 years.</td>
</tr>
<tr>
<td>Engineer</td>
<td>Person in this position provides day-to-day engineering support to the Project Manager, Project Engineer, Engineer and other team members as required for their respective projects. This person has a professional license in North Carolina and professional-level experience of over 3 years.</td>
</tr>
<tr>
<td>Engineering Associate</td>
<td>Person in this position provides day-to-day engineering support to the Project Manager, Project Engineer, Engineer and other team members as required for their respective projects. This person is an Engineering Intern or has an Engineering Associates degree with appropriate technical experience.</td>
</tr>
<tr>
<td>Senior Technician</td>
<td>Person in this position provides senior technical-level support to the Project Team. Support may include CAD services, GIS, or other technical-level work. This person has 10 years of experience providing technical-level work.</td>
</tr>
<tr>
<td>Technician</td>
<td>Person in this position provides technical-level support to the Project Team. Support may include CAD services, GIS, or other technical-level work. This person has 4 years of experience providing technical-level work.</td>
</tr>
<tr>
<td>Registered Land Surveyor</td>
<td>This person is a North Carolina Board of Engineers and Land Surveyors certified Land Surveyor and has 4 years of professional-level experience.</td>
</tr>
<tr>
<td>2 Person Survey Crew</td>
<td>These individuals form a surveying team, acting as an Instrument Person and Rod-Person.</td>
</tr>
<tr>
<td>Administrative Assistant</td>
<td>This person performs administrative and clerical-level work for the Project Team, including data entry, word processing, and other non-technical support work as needed for the Project.</td>
</tr>
</tbody>
</table>
REIMBURSABLE EXPENSES

Reimbursable expenses for each individual project shall be clearly itemized by the Consultant. The following guidelines shall be used to develop these expenses:

1. Overtime at straight time rates shall apply for exempt employees to the extent the employee works more than 40 hours per week on Owner’s project.
2. Subcontracted services shall be based on Cost Plus 5%. Consultant shall obtain Owner’s approval before authorizing such services.
3. Cost of printing and reproducing drawings and bid documents, except for those included in the lump sum cost.
4. Cost for use of field equipment, safety equipment and field sampling equipment.
5. Cost of courier and express mail services.
6. Living and traveling expenses when Consultant’s employees are away from home on Owner’s project assignments. The following limitations shall apply:
   - Base room charges (excluding taxes and other fees) shall not exceed $119 per night.
   - Base rental car charges (excluding taxes and other fees) shall not exceed $60 per day.
   - Meal charges per individual shall not exceed $51 per day.
7. Automobile mileage to be reimbursed at rate established and updated by Internal Revenue Service.
ATTACHMENT B
PROJECT SCOPE OF SERVICES

Project Title: WTP Electrical Distribution Improvements, New Clearwell, and Finish Water Pump Station

OWASA’s CIP #: 272-64

Project Contract Administrators:

<table>
<thead>
<tr>
<th>OWASA</th>
<th>Consultant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brad Barber</td>
<td></td>
</tr>
<tr>
<td>Utilities Engineer</td>
<td></td>
</tr>
<tr>
<td>Orange Water and Sewer Authority</td>
<td></td>
</tr>
<tr>
<td>400 Jones Ferry Road</td>
<td></td>
</tr>
<tr>
<td>Carrboro, NC 27510</td>
<td></td>
</tr>
<tr>
<td>Office: (919) 537-4248</td>
<td></td>
</tr>
</tbody>
</table>

Project Background:

...  

Project Scope:

Task 1 – Kickoff Meeting, Flow Monitoring and Data Collection  
...  
Task 2 - ...  
...  

Deliverables:

*Specify deliverables, number of copies, and format.*

Project Team:

...

Key Team Members:

...  

The OWNER will be notified in writing of changes to the project team members. Other staff may participate in the project in a minor role at Consultant’s discretion.
Project Schedule:
    
    List durations for interim milestones and final completion in total number of days from Notice to Proceed.

Compensation:
    
    Provide compensation basis (lump sum, cost ceiling) and subtotals by task.
    Provide separate subtask breakdowns for projects above exemption limit, or as warranted.

Owner Responsibilities
    
    
Scope Exceptions, Additional Services, etc