

CITY OF ROCHELLE , ILLINOIS  
WATER RECLAMATION FACILITY (WRF) IMPROVEMENTS

ENGINEERING SERVICES AGREEMENT

THIS IS AN AGREEMENT effective as of \_\_\_\_\_, \_\_\_\_\_ (“Effective Date”) between the City of Rochelle, Illinois (“Owner”) and Baxter and Woodman, Inc. (“Engineer”).

Owner’s Project, of which the Engineer’s services under this Agreement are a part, is generally identified in Exhibit A (“Project”), attached hereto and incorporated herein by this reference.

Owner and Engineer in consideration of their mutual covenants set forth herein agree as follows:

1. **SERVICES OF ENGINEER**

1.1 Engineer shall provide, or cause to be provided, if part of its scope, the services set forth herein and in Exhibit B, attached hereto and incorporated herein by this reference.

2. **OWNER’S RESPONSIBILITIES**

2.1 Provide the Engineer with all criteria and full information as to the Owner’s requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, and any budgetary limitations; and furnish copies of all design and construction standards which Owner will require to be included in the Drawings and Specifications, and furnish copies of Owner’s standard forms, conditions, and related documents for Engineer to include in the Bidding Documents, when applicable.

2.2 Furnish the Engineer all available information pertinent to the Project including reports and data relative to previous designs, existing conditions, or investigations at or adjacent to the Site.

2.3 Furnish or otherwise make available additional project related information and data as is reasonably required to enable Engineer to complete the Project.

2.4 Owner warrants that all known hazardous materials on or beneath the site have been identified to the Engineer. The Engineer shall have no responsibility for the discovery, presence, handling, removal or disposal of, or exposure of persons to, unidentified or undisclosed hazardous materials. The Engineer shall not be required by the Owner to provide certifications that soils, including soil mixed with other clean construction or demolition debris, are or are not contaminated unless this service is set forth in Exhibit B.

- 2.5 The Engineer will rely, without liability, upon the accuracy and completeness of all information furnished by the Owner, including its consultants, contractors, specialty contractors, manufacturers, suppliers, and publishers of technical standards pursuant to this Agreement without independently verifying the information.
- 2.6 The Engineer may reasonably rely on the express and implied representations made by contractors, manufacturers, suppliers, and installers of equipment, materials, and products required by the construction documents as being suitable fit for their intended purposes and compliant with the construction documents and applicable project requirements.
- 2.7 Arrange for safe access to and make all provisions for Engineer to enter upon public and private property as required for Engineer to perform services under this Agreement.

### 3. **SCHEDULE FOR RENDERING SERVICES**

- 3.1 Engineer is authorized to begin services as of the Effective Date.
- 3.2 Engineer shall complete its obligations within a reasonable time. Specific periods of time for rendering services are set forth or specific dates by which services are to be completed are provided in Exhibit B, and are hereby agreed to be reasonable.
- 3.3 If Owner authorizes changes in the scope, extent, or character of the Project, then the time for completion of Engineer's services, and the rates and amounts of Engineer's compensation shall be adjusted equitably.
- 3.4 If the Engineer is hindered, delayed or prevented from performing under the Agreement as a result of any act or neglect of the Owner (or those for whom the Owner is responsible) or force majeure, the time for completion of the Engineer's work shall be extended by the period of the resulting delay and the rates and amounts of Engineer's compensation shall be adjusted equitably. Force majeure includes, but is not limited to acts of God, wars, terrorism, strikes, labor walkouts, fires, natural disasters, or requirements of governmental agencies.

### 4. **COMPENSATION, INVOICES AND PAYMENTS**

- 4.1 The OWNER shall pay the Engineer for the services performed or furnished under Exhibit B, Sections Study 1-8, for the Water Reclamation Facility Improvements – Study, based upon the Engineer's standard hourly billing rates for actual work time performed plus reimbursement of out-of-pocket expenses including travel which will not exceed \$25,000, Engineer's Project No. 171097.30. Deduct \$6,200 if Exhibit B Item 5 is not required. The Engineer may adjust the hourly billing rate and out-of-pocket expenses on or about January 1 of each subsequent year and will send the new schedule to the Owner.

The OWNER shall pay the Engineer for the services performed or furnished under Exhibit B, Sections Design 1-10, for the Water Reclamation Facility Improvements – Design, based upon the Engineer’s standard hourly billing rates for actual work time performed plus reimbursement of out-of-pocket expenses including travel which will not exceed \$403,500, Engineer’s Project No. 171097.40. The Engineer may adjust the hourly billing rate and out-of-pocket expenses on or about January 1 of each subsequent year and will send the new schedule to the Owner.

The OWNER shall pay the Engineer for the services performed or furnished under Exhibit B, Sections Construction 1-8, for the Water Reclamation Facility Improvements – Construction Services, based upon the Engineer’s standard hourly billing rates for actual work time performed plus reimbursement of out-of-pocket expenses including travel which will not exceed \$388,000, Engineer’s Project No. 171097.60. The Engineer may adjust the hourly billing rate and out-of-pocket expenses on or about January 1 of each subsequent year and will send the new schedule to the Owner.

- 4.2 The Engineer may submit requests for periodic progress payments for services rendered. Payments shall be due and owing by the Owner in accordance with the terms and provisions of the Local Government Prompt Payment Act, Illinois Compiled Statutes, Ch.50, Sec. 505, et. Seq.; and if Owner fails to comply, the Engineer may, after giving seven (7) days written notice to the Owner, suspend services under this Agreement until the Engineer has been paid in full all amounts due for services, expenses, and late payment charges as provided in such Act.
- 4.3 The Owner may, at any time, by written order, make changes to the scope of this Agreement, which changes shall not become effective unless and until Engineer issues its written acceptance of same. If such changes cause an increase or decrease in the Engineer’s fee or time required for performance of any services under this Agreement, an equitable adjustment shall be made and this Agreement shall be modified. No service for which added compensation is to be charged will be provided without first obtaining written authorization from the Owner. The parties further agree that if elements of the scope are reduced or eliminated by the Owner, then the Owner agrees to waive, forgive, release, and hold harmless the Engineer from all claims, causes of action, and damages arising from those reduced and/or eliminated services. The Engineer shall not be responsible for the changes made to the project documents by the Owner, contractor, or others without the Engineer’s prior review and written approval.

5. **OPINION OF PROBABLE CONSTRUCTION COSTS**

5.1 The Engineer's opinion of probable construction costs, if included in its scope of services, represents its reasonable judgment as a professional engineer. The Owner acknowledges that the Engineer has no control over construction costs or contractor's methods of determining prices, or over competitive bidding, or market conditions. The Engineer cannot and does not warranty or guarantee that proposals, bids, or actual construction costs will not vary from the Engineer's opinion of probable cost. Engineer shall not be responsible for any cost variance.

6. **ENGINEER'S PERFORMANCE**

6.1 The standard of care for all professional engineering and related services performed or furnished by the Engineer under this Agreement will be the care and skill ordinarily used by members of Engineer's profession practicing under similar circumstances at the same time and in the same locality on similar projects. Engineer makes no warranties, express or implied, under this Agreement or otherwise, in connection with Engineer's services.

6.2 Engineer shall be responsible for the technical accuracy of its services and its instruments of service resulting therefrom, and Owner shall not be responsible for discovering deficiencies, if any, in them. Engineer shall correct known deficiencies in its instruments of service without additional compensation except to the extent such action is directly attributable to deficiencies, errors or omissions in Owner-furnished information.

6.3 The Engineer will use reasonable care to comply with applicable laws, regulations, and Owner-mandated standards as of this Agreement's Effective Date. Changes to these requirements after the Effective Date of this Agreement may be the basis for modifications to Owner's responsibilities or to Engineer's scope of services, times of performance, or compensation, which shall be adjusted equitably.

6.4 Engineer may employ such sub-consultants as Engineer deems necessary to assist in the performance or furnishing of the services, subject to reasonable, timely, and substantive written objections by the Owner.

6.5 Engineer shall not supervise, direct, control, or have charge or authority over any contractor's work, nor shall the Engineer have authority over or be responsible for the means, methods, techniques, sequences, or procedures of construction selected or used by any contractor, or the safety precautions and programs incident thereto, for security or safety at the site, nor for any failure of any contractor to comply with laws and regulations applicable to such contractor's furnishing and performing of its work.

6.6 Engineer neither guarantees the performance of any contractor nor assumes responsibility for any contractor's failure to furnish and perform the work in accordance with the contract

documents, which contractor is solely responsible for its errors, omissions, and failure to carry out the work.

- 6.7 Engineer shall not provide or have any responsibility for surety bonding or insurance-related advice, recommendations, counseling, or research, or enforcement of construction or surety bonding requirements.
- 6.8 Engineer is not acting as a municipal advisor as defined by the Dodd-Frank Act. Engineer shall not provide advice or have any responsibility for municipal financial products or securities.
- 6.9 Engineer shall not be responsible for the acts of omissions of any contractor, subcontractor, or supplier, or of any of their agents or employees or any other person, (except Engineer's own agents, employees, and consultants) at the site or otherwise furnishing or performing any work; or for any decision made regarding the contract documents, or any application, interpretation, or clarification, of the contract documents, other than those made by the Engineer.
- 6.10 Shop drawing and submittal review by Engineer shall apply only to the items in the submissions and only for the purpose of assessing, if upon installation or incorporation in the Project, they are generally consistent with the construction documents. Owner agrees that the contractor is solely responsible for the submissions (regardless of the format in which provided, i.e. hard copy or electronic transmission) and for compliance with the contract documents. Owner further agrees that the Engineer's review and action in relation to these submissions shall not constitute the provision of means, methods, techniques, sequencing or procedures of construction or extend to safety programs or precautions. Engineer's consideration of a component does not constitute acceptance of the assembled item.
- 6.11 Engineer's site observation shall be at the times agreed upon in the Exhibit B. Through standard, reasonable means, Engineer will become generally familiar with observable completed work. If Engineer observes completed work that is inconsistent with the construction documents, that information shall be communicated to the contractor and Owner to address.

## 7. **INSURANCE**

- 7.1 For the duration of the Project, the Engineer shall procure and maintain the following insurance coverage and Certificates of Insurance will be provided the Owner upon written request. The insurance required shall provide coverage for not less than the following amounts, or greater where required by law:

(1) Worker's Compensation

Statutory Limits

(2)	General Liability	
	Per Claim/Aggregate	\$1,000,000/\$2,000,000
(3)	Automobile Liability	
	Combined Single Limit	\$1,000,000
(4)	Excess Umbrella Liability	
	Per Claim/ Aggregate	\$5,000,000/\$5,000,000
(5)	Professional Liability	
	Per Claim and Aggregate	\$5,000,000/\$5,000,000

7.2 Notwithstanding any other provisions of this Agreement, and to the fullest extent permitted by law, the total liability, of the Engineer and their officers, directors, employees, agents, or consultants to anyone claiming by, through or under Owner for any claims, losses, costs, or damages arising out of, resulting from, of in any way related to the Project or the Agreement for any claim or cause of action, including but not limited to the negligence, professional errors or omissions strict liability, breach of contract, indemnity, subrogation or warranty (express or implied), hereafter referred to as the "Claims", shall not exceed the total remaining insurance proceeds available under the terms and conditions of Engineer's responding insurance policy.

**8. INDEMNIFICATION AND MUTUAL WAIVER**

8.1 To the fullest extent permitted by law, Engineer shall indemnify and hold harmless the Owner and its officers and employees from claims, costs, losses, and damages arising out of or relating to the Project, provided that such claims, costs, losses, or damages are attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property, including the loss of use resulting therefrom, but only to the extent caused by the Engineer's negligent acts or omissions.

8.2 Owner shall indemnify and hold harmless the Engineer and its officers, directors, employees, agents and consultants from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to the Project provided that any such claims, costs, losses, or damages are attributable to bodily injury, sickness, disease, or death of, or destruction of tangible property, including the loss of use resulting therefrom, but only to the extent caused by the negligent acts or omissions of Owner or its officers, directors, employees, consultants,

agents, or others retained by or under contract to the Owner with respect to this Agreement and/or to the Project.

- 8.3 To the fullest extent permitted by law, Owner and Engineer waive against each other, and the other's employees, officers, directors, insurers, and consultants, any and all claims for or entitlement to special, incidental, indirect, exemplary, or consequential damages arising out of, resulting from, or in any way related to the Project or Engineer's services.
- 8.4 In the event claims, losses, damages or expenses are caused by the joint or concurrent fault of the Engineer and Owner, they shall be borne by each party in proportion to their respective fault, as determined by a mediator or court of competent jurisdiction.
- 8.5 The Owner acknowledges that the Engineer is a business corporation and not a professional service corporation, and further acknowledges, accepts, and agrees that the Engineer's officers, directors, and employees shall not be subject to any personal liability for services provided under this Agreement.

## 9. **TERMINATION**

- 9.1 This Agreement may be terminated, in whole or in part, by either party if the other party fails to fulfill its obligations under this Agreement through no fault of the terminating party. The Owner may terminate this Agreement, in whole or in part, for its convenience. However, no such termination will be effective unless the terminating party gives the other party (1) not less than ten (10) business day's written notice by certified mail of intent to terminate, and (2) an opportunity for a meeting with the terminating party to resolve the dispute before termination.
- 9.2 If this Agreement is terminated by either party, the Engineer shall be paid for services performed to the effective date of termination, including reimbursable expenses. In the event of termination, the Owner will receive reproducible copies of Drawings, Specifications and other documents completed by the Engineer up to the date of termination.

## 10. **USE OF DOCUMENTS**

- 10.1 All documents (data, calculations, reports, Drawings, Specifications, Record Drawings and other deliverables, whether in printed form or electronic media format, provided by Engineer to Owner pursuant to this Agreement) are instruments of service in respect to this Project, and the Engineer shall retain an ownership and property interest therein (including the copyright and right of reuse at the discretion of the Engineer) regardless of the Project's completion. Owner shall not rely in any way on any document unless it is in printed form, signed or sealed by the Engineer or one of its consultants.

- 10.2 Either party to this Agreement may rely that data or information set forth on paper (also known as hard copy) that the party receives from the other party by mail, hand delivery, or facsimile, are the items that the other party intended to send. Information in electronic format or text, data, graphics, or other types that are furnished by one party to the other are furnished only for convenience and not for reliance by the receiving party. The use of such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies will govern.
- 10.3 Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests and/or procedures within 60 calendar days of receipt, after which the receiving party shall be deemed to have accepted the transferred data thus. Any transmittal errors detected within the 60-day acceptance period will be corrected by the party delivering the electronic files.
- 10.4 When transferring documents in electronic media format, the transferring party makes no representations as to long-term compatibility, usability, or readability of such information resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the creator.
- 10.5 The Engineer's document retention policy will be followed upon Project closeout. Executed copies of agreements, work orders, letters of understanding or proposals; design or other documents created by the Engineer or received from the Owner or a third party: plan review submittals from a third party and the Engineer's review of those submittals; and studies or reports prepared by the Engineer will be kept for a period of 14 years after Project closeout.

#### 11. **SUCCESSORS, ASSIGNS AND BENEFICIARIES**

- 11.1 Owner and Engineer are hereby bound, as are their respective successors, employees and representatives to the other party to this Agreement with respect to all covenants, terms, promises, and obligations contained herein.
- 11.2 Neither the Owner nor Engineer may assign, sublet, or transfer any rights under or interest (including, but without limitation, monies that are due or may become due) in this Agreement without the written consent of the other, except to the extent that any assignment, subletting, or transfer is required by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any obligation under this Agreement.
- 11.3 Unless expressly provided otherwise in this Agreement, nothing contained shall be construed to create, impose, or give rise to any duty owed by Owner or Engineer to any Contractor, Subcontractor, Supplies, or other individual or entity, or to any surety for or

employee of any of them. All duties and responsibilities undertaken to this Agreement will be for the sole and exclusive benefit of Owner and Engineer and not for the benefit of any other party.

## **12. DISPUTE RESOLUTION**

- 12.1 Owner and Engineer agree to negotiate all disputes between them in good faith for a period of 30 calendar days from the date of notice prior to invoking the procedures of paragraph 12.2 or other provisions of the Agreement, or exercising their rights under law.
- 12.2 If the parties fail to resolve a dispute through negotiation under paragraph 12.1, Owner and Engineer agree that they shall first submit any and all unsettled claims, counterclaims, disputes, and other matters in question between them arising out of or relating to this Agreement or the breach thereof (“Disputes”) to mediation. Owner and Engineer agree to participate in the mediation process in good faith. The process shall be conducted on a confidential basis, and shall be completed within 120 calendar days of notice if the Dispute unless the parties mutually agree to a longer period. If such mediation is unsuccessful in resolving a Dispute, then the parties may seek to have the Dispute resolved by a court of competent jurisdiction.

## **13. MISCELLANEOUS PROVISIONS**

- 13.1 This Agreement is to be governed by the law of the state or jurisdiction in which the Project is located.
- 13.2 Any notice required under this Agreement will be in writing, addressed to the designated party at its address in the signature page and served personally, by facsimile, by registered or certified mail (postage prepaid), or by a commercial courier service. All notices shall be effective upon the date of receipt.
- 13.3 All express representations, waivers, indemnifications, and limitations of liability in this Agreement will survive its completion and/or termination.
- 13.4 Any provision or part of the Agreement held to be void or unenforceable under any laws or regulations shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon the Owner and Engineer, which agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that expresses the intention of the stricken provision.
- 13.5 A party’s non-enforcement of any provision shall not constitute a waiver of the provision, nor shall it affect the enforceability of that provision or of the remainder of this Agreement.
- 13.6 To the fullest extent permitted by law, all causes of action arising under this Agreement shall be deemed to have accrued, and all statutory periods of limitation shall commence, no

later than the date of substantial completion, which is the point where the Project can be utilized for the purposes for which it was intended.

13.7 This Agreement constitutes the entire agreement between Owner and Engineer and supersedes all prior or oral understandings. This Agreement may be amended only by a mutually agreed and executed written instrument.

13.8 With the execution of this Agreement, Engineer and Owner shall designate specific individuals to act as Engineer's and Owner's representatives with respect to the services to be performed or furnished by Engineer and responsibilities of Owner under this Agreement. Such an individual shall have authority to transmit instructions, receive information, and render decisions relative to the Project on behalf of the respective party whom the individual represents.

#### 14. **WATER POLLUTION CONTROL LOAN PROGRAM (WPCLP) ENGINEERING PROVISIONS**

##### 14.1 Audit and Access to Records Clause

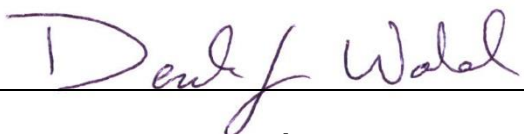
- (1) Books, records, documents and other evidence directly pertinent to performance of WPCLP loan work under this agreement shall be maintained in accordance with generally accepted Accounting Principles. The Agency or any of its authorized representatives shall have access to the books, records, documents and other evidence for the purpose of inspection, audit and copying. Facilities shall be provided for access and inspection.
- (2) Audits conducted pursuant to this provision shall be in accordance with auditing standards generally accepted in the United States of America.
- (3) All information and reports resulting from access to records pursuant to the above shall be disclosed to the Agency. The auditing agency shall afford the engineer an opportunity for an audit exit conference and an opportunity to comment on the pertinent portions of the draft audit report.
- (4) The final audit report shall include the written comments, if any, of the audited parties.
- (5) Records shall be maintained and made available during performance of project services under this agreement and for three years after the final loan closing. In addition, those records that relate to any dispute pursuant to the loan Rules Section 365.650 (Disputes) or litigation or the settlement of claims arising out of project performance or costs or items to which an audit exception has been taken, shall be maintained and made available for three years after the resolution of the appeal, litigation, claim or exception.

- 14.2 **Covenant Against Contingent Fees:** The professional services contractor (engineer) warrants that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bonafide employees. For breach or violation of this warranty, the loan recipient shall have the right to annul this agreement without liability or in its discretion to deduct from the contract price or consideration or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.
- 14.3 **USEPA Non-Discrimination Clause:** The engineer shall not discriminate on the basis of race, color, national origin or sex in the performance of this contract. The engineer shall carry out applicable requirements of 40 CFR Part 33 in the award and administration of contracts awarded under EPA financial assistance agreements. Failure by the engineer to carry out these requirements is a material breach of this contract which may result in the termination of this contract or other legally available remedies.
- 14.4 **USEPA Fair Share Percentage Clause:** The engineer agrees to take affirmative steps to assure that disadvantaged business enterprises are utilized when possible as sources of supplies, equipment, construction and services in accordance with the WPC Loan Program rules. As required by the award conditions of USEPA's Assistance Agreement with Illinois EPA, the engineer acknowledges that the fair share percentages are 5% for MBEs & 12% for WBEs.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, the Effective Date of which is indicated on page 1.

Engineer:  
Baxter & Woodman, Inc.

Owner:  
City of Rochelle, Illinois

By: 

By: \_\_\_\_\_

Title: Executive Vice President

Title: City Manager

Date Signed: November 13, 2017

Date Signed: \_\_\_\_\_

Address for giving notices:  
8678 Ridgfield Road  
Crystal Lake, IL 60012

Address for giving notices:  
PO Box A  
420 North 6<sup>th</sup> Street  
Rochelle, IL 61068

Designated Representative:  
Amanda Sheposh  
Phone Number: 815-444-3212  
Email Address: [asheposh@baxterwoodman.com](mailto:asheposh@baxterwoodman.com)

Designated Representative:  
Adam Lanning  
Phone Number: 815-561-2065  
Email Address: [alanning@rmu.net](mailto:alanning@rmu.net)

CITY OF ROCHELLE , ILLINOIS  
WATER RECLAMATION FACILITY (WRF) IMPROVEMENTS

EXHIBIT A

**PROJECT DESCRIPTION**

This Project entails making improvements to the Owner's existing Water Reclamation Facility (WRF). The Owner intends to fund the Project with a loan from IEPA's Water Pollution Control Loan Program (WPCLP).

The Engineer will provide Professional Engineering Services including but not limited to the services described in Exhibit B attached hereto. These services will include serving as the City's representative, providing consultation and advice, and furnishing customary engineering and construction related services.

The Project includes three consecutive phases: Study, Design, and Construction.

**WRF Improvements – Study**

The Study is intended to determine the impacts of removing the anaerobic lagoon, make a recommendation for design of improvements with or without the lagoon addition, and confirm the scope of the proposed improvements otherwise.

The WRF has two main interceptors – one with primarily domestic waste that enters the WRF, and the other from primarily industrial waste, which is treated in an anaerobic lagoon on the WRF site prior to mainstream treatment. A previous study indicated that, to keep the anaerobic lagoon in service, approximately \$1.3 million in improvements are required to remove accumulated solids and replace the lagoon cover.

The Study will evaluate the impact of bypassing the anaerobic lagoon. Bypassing the lagoon will increase the load on the WRF's treatment processes, especially the BOD and TSS load. In addition, other downstream impacts may include blower replacement, higher energy consumption and potential service replacement, activated sludge system foaming, etc.

A summary of the evaluation will be prepared for review with the City. Comments from the City will be incorporated to create a final report. The final report will be used to finalize the design scope and update the Owner's Facility Planning Report. Revisions to the Report will be submitted to Illinois EPA for Planning Approval.

## **WRF Improvements - Design**

The Study could change the improvements that the Engineer will actually design. However, for the purpose of establishing scope and fee for this Agreement, the WRF Improvements - Design project includes design of the following 7 items that the Owner established at the onset of the Project, before the Study is started:

1. **System 1 Lift Station Modifications:** Convert the existing wet well/dry well lift station into a submersible lift station. Replace the existing bar screen with a fine screen.
2. **Preliminary Building Fine Screen:** Remove the existing climber screen. Replace it with a new, different type of screen that captures more screenings and removes them quicker.
3. **Preliminary Building Grit Classifier Replacement:** Remove the existing fine screen (“Rotostrainer”). Replace it with a new, different type of grit washing and dewatering device; one that is more typically used at wastewater treatment plants.
4. **Aeration Tank Modifications:** Modify the Aeration Tanks possibly including re-configuration of anaerobic/anoxic/aerobic zones and addition of D.O. probes, ORP probes, ammonia probes, air flow meters, and motor actuators for air valves.
5. **SCADA System Replacement:** Replace the existing SCADA system, which controls the operations of the water reclamation plant based on the SCADA Assessment completed during preliminary design. The SCADA system replacement will likely include a new fiber optic network connecting all of the buildings in a ring configuration. The buildings where new process controllers are added will be added to the existing Headend system. Equipment and Processes which are not being updated under this project will only be connected to SCADA in the capacity of control and monitoring they have now.
6. **Administration Building Expansion** Construct a ±1,800 square foot building expansion to the existing administration building. The building expansion will include staff offices, SCADA office, conference room, and break room.
7. **Centrifugal Blower Replacement:** Replace one, two, or all three of the existing 250 HP Spencer multistage centrifugal blowers with high-speed, high-efficiency blower(s).

The Engineer will prepare Plans & Specifications per WPCLP requirements. The Engineer will also prepare construction permit applications, perform loan coordination, and provide bid assistance.

## **WRF Improvements – Construction**

After the Project bids and the Owner receives a WPCLP Loan Agreement from IEPA, the Project will move into the Construction Phase.

In this phase, the Engineer will provide construction-related engineering services for the WRF Improvements, including construction administration, administration of loan disbursements, and construction observation.

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CITY OF ROCHELLE , ILLINOIS  
WATER RECLAMATION FACILITY (WRF) IMPROVEMENTS

EXHIBIT B

**SCOPE OF SERVICES**

**WRF IMPROVEMENTS – STUDY**

The Work for this Study will be completed within 90 days of the effective date of the Contract.

1. DATA COLLECTION and ANALYSIS – Prepare an information request for WRF operational data. Review and analyze data to understand WRF performance efficiencies and limitations.
2. EVALUATION – Develop a Basis of Design that takes into account the City’s design standards and design criteria from the Illinois Recommended Standards for Sewage Works. Evaluate overall WRF impacts, including changes to electrical power usage, associated with removing the anaerobic lagoon, including the following:
  - A. Flow and load equalization;
  - B. Aeration process energy consumption;
  - C. Sludge production;
  - D. Pre-Treatment alternatives;
  - E. Activated sludge scum removal;
  - F. Plant operations; and
  - G. Electrical power consumption.
3. STUDY REPORT – Prepare a summary of the study findings for review with the Utilities Director and his Staff prior to entering into design.
4. OPINION OF PROBABLE COST – Develop an opinion of probable total project cost, including construction, engineering services, contingencies, and, on the basis of information provided by the City, allowances for legal services, financial consultants, and any administrative services or other costs necessary for completion of the Project. Prepare a lifecycle analysis based on energy impact.
5. FACILITY PLANNING REPORT – Prepare updates to the City’s 2016 Facility Planning Report, in conformance with Illinois Environmental Protection Agency (IEPA) requirements. The Report will outline any changes from the submitted plan to the design scope. Provide three copies of the Amendment to the City for review, comments, and approval. Submit the Amendment to the IEPA for review, comments, and approval.

6. Assist the City with advertising for Public Comments. It is expected that the Project will receive a Categorical Exclusion as part of the Preliminary Environmental Impact Determination (PEID) performed by IEPA and a public hearing will not be required.
7. ADMINISTRATION & MEETINGS – Confer with the Utilities Director, his Staff, and the Project Team, to ensure the goals of the Project are achieved, and to clarify and define the general scope, extent, and character of the Project.
  - A. Conduct a Project kick-off meeting with the City staff and the Project Team at the beginning of the design.
  - B. Conduct a review meeting at the completion of the Study phase.
8. PROJECT MANAGEMENT – Plan, schedule, and control the activities that must be performed to complete the Project. These activities include but are not limited to budget, schedule, and scope.

#### **WRF IMPROVEMENTS – DESIGN**

The Work for this Design will be completed within 365 days of the effective date of the Contract.

1. SITE VISIT - Inspect existing treatment unit structures and equipment as to their conditions and suitability for continued use or modification for reuse. Conduct an Energy Audit to be used as the benchmark during preparation of Design Scope and Final Design.
2. TOPOGRAPHIC SURVEY - Perform topographic survey within the project limits of the wastewater treatment plant site in order to develop base sheets for project plan drawings. In addition, obtain data or record indicating locations of underground utilities
3. GEOTECHNICAL SUBCONSULTANT – Employ a geotechnical subconsultant to make soil borings, collect, and analyze soil samples, determine groundwater levels, and prepare a written report for structural design. Soil borings will be made at the site of each major structure.
4. DESIGN SCOPE - Consider and include the following improvements in the Preliminary design:
  - A. System 1 Lift Station Modifications: Convert the existing wet well/dry well lift station into a submersible lift station. Replace the existing bar screen with a fine screen.
  - B. Preliminary Building Fine Screen and Grit Classifier Replacement: Remove and replace the existing screen.
  - C. SCADA System Replacement: Design for replacement of the existing SCADA system, which controls the operations of the water reclamation plant and lift stations. Design controls for new equipment, modifications of existing equipment controls, and new

- power wire and conduit, as determined at the Site Visit. Design for alarm communications.
- D. Administration Building Expansion: Construct a ±1,800 square foot building expansion to the existing administration building. The building expansion will include staff offices, SCADA office, and conference room and break room.
  - E. Centrifugal Blower Replacement: Replace the three existing 250 HP mutli-stage centrifugal blowers with high efficiency blowers.
5. FINAL DESIGN - Prepare Design Documents consisting of Drawings showing the general scope, extent and character of construction work to be furnished and performed by the Contractor(s) selected by the City and Specifications which will be prepared in conformance with the format of the Construction Specification Institute.
- A. CONSTRUCTION DOCUMENTS - Prepare for review and approval by the City and its legal counsel the forms of Construction Contract Documents consisting of Advertisement for Bids, Bidder Instructions, Bid Form, Agreement, Performance Bond Form, Payment Bond Form, General Conditions, and Supplementary Conditions, where appropriate, based upon documents prepared by the Engineers Joint Contract Document Committee (EJCDC).
  - B. FINAL OPINION OF PROBABLE COST - Prepare a final opinion of probable construction cost based on the Design Documents.
6. AGENCY SUBMITTALS
- A. IEPA DWPC - Submit the Design Documents and permit application to the IEPA for its review and approval for the City to construct and operate the Project. Furnish the City with three (3) sets of the Design Documents approved by IEPA.
  - B. If necessary, submit permit applications and support documentation to the City of Rochelle Building Department.
7. ASSISTANCE DURING BIDDING
- A. Assist the City in solicitation of construction bids from as many qualified bidders as possible.
  - B. Conduct a pre-bid meeting.
  - C. Answer questions from potential bidders. Prepare and issue addenda.
  - D. Attend the bid opening.
  - E. Tabulate bid proposals.
  - F. Analyze the bids.
  - G. Prepare and submit a recommendation for the award of the construction contract.

8. LOAN APPLICATION – Assist the City with preparation of an application and supporting documentation for a low-interest loan through the Water Pollution Control Loan Program (WPCLP) administered by IEPA.

A. DIVISION OF RESPONSIBILITY – The City and the Engineer will share in the responsibility for preparing the loan application.

- The City will prepare and assemble the financial documentation that is required to demonstrate that the City has the ability to pay back the loan. The City will also provide some of the information that is needed for the various forms; information that only the City can access or that can be accessed more easily by the City. The main financial documents are:
  - a) The dedicated source of revenue.
  - b) The user charge ordinance.
  - c) Information on the bond issue or other funds to pay the local share, if any.
  - d) The loan ordinance, which is prepared by the City's attorney.
  - e) The City attorney's legal opinion.
  - f) Financial and compliance audit.
  - g) Any applicable service agreements.
- The Engineers will prepare the following:
  - a) Administrative items:
    - (1) Loan Application Form.
    - (2) Financial Information Checklist.
    - (3) Financial Sustainability Plan.
    - (4) Project Completion Schedule.
    - (5) Summary of Construction Costs.
    - (6) Statement regarding access to privately owned individual systems, if applicable.
    - (7) If IEPA issues an updated version of the loan application package, the above items will change accordingly.
  - b) Engineering Items
    - (1) Bidding documents (plans and specifications).
    - (2) Summary of the participation of Disadvantage Business Enterprises (DBEs), if any, during design.
    - (3) Cost estimate in the bid format.
    - (4) Executed engineering services agreement for construction related work.

- c) Bidding Documentation – Submittal of bid tabulation, low bidder’s bid form, and other bidding documentation to IEPA as required to obtain a loan offer.
- 9. ADMINISTRATION & MEETINGS – Confer with the Utilities Director, his Staff, and the Project Team, to ensure the goals of the Project are achieved, and to clarify and define the general scope, extent, and character of the Project.
  - A. Automation Kickoff Meeting and SCADA Assessment: This meeting will be an opportunity for the Engineer and Owner to discuss the expectation of the SCADA system improvements and formulate a plan for execution.
  - B. Conduct project progress meetings with the City staff and the Project Team at 30%, 75%, and 90% completion.
  - C. SCADA / Control Meeting
- 10. PROJECT MANAGEMENT – Plan, schedule, and control the activities that must be performed to complete the Project. These activities include but are not limited to budget, schedule, and scope.

### **WRF IMPROVEMENTS – CONSTRUCTION**

The Work for this Design will be completed within 365 days of the effective date of the Contract or to match the contract duration of the Construction Contract. Any additional time required for construction engineering services is not included and will be renegotiated with the City.

- 1. Act as the Owner’s representative with duties, responsibilities and limitations of authority as assigned in the construction contract documents.
- 2. PROJECT INITIATION
  - A. Prepare Award Letter, Agreement, Contract Documents, Performance/Payment Bonds, and Notice to Proceed.
  - B. Review Contractor insurance documents.
  - C. Attend and prepare minutes for the preconstruction conference, and review the Contractor’s proposed construction schedule and list of subcontractors.
- 3. CONSTRUCTION ADMINISTRATION
  - A. Attend periodic construction progress meetings.
  - B. Shop drawing and submittal review by Engineer shall apply only to the items in the submissions and only for the purpose of assessing, if upon installation or incorporation in the Project, they are generally consistent with the construction documents. Owner agrees that the contractor is solely responsible for the

submissions (regardless of the format in which provided, i.e. hard copy or electronic transmission) and for compliance with the contract documents. Owner further agrees that the Engineer's review and action in relation to these submissions shall not constitute the provision of means, methods, techniques, sequencing or procedures of construction or extend to safety programs or precautions. Engineer's consideration of a component does not constitute acceptance of the assembled item.

- C. Review construction record drawings for completeness prior to submission to CADD.
- D. Provide updates to the City's GIS maps with information from the construction record drawings.
- E. Prepare construction contract change orders and work directives when authorized by the Owner.
- F. Review the Contractor's requests for payments as construction work progresses, and advise the Owner of amounts due and payable to the Contractor in accordance with the terms of the construction contract documents.
- G. Research and prepare written response by Engineer to request for information from the Owner and Contractor.
- H. Project manager or other office staff visit site as needed.

#### 4. FIELD OBSERVATION

- A. Engineer's site observation shall be at the times agreed upon with the Owner. Engineer will provide Resident Project Representatives at the construction site on a full-time basis of forty (40) hours per week from Monday through Friday, not including legal holidays, as deemed necessary by the Engineer, to assist the Contractor with interpretation of the Drawings and Specifications, to observe in general if the Contractor's work is in conformity with the Final Design Documents, and to monitor the Contractor's progress as related to the Construction Contract date of completion. Through standard, reasonable means, Engineer will become generally familiar with observable completed work. If Engineer observes completed work that is inconsistent with the construction documents, that information shall be communicated to the contractor and Owner to address. Engineer shall not supervise, direct, control, or have charge or authority over any contractor's work, nor shall the Engineer have authority over or be responsible for the means, methods, techniques, sequences, or procedures of construction selected or used by any contractor, or the safety precautions and programs incident thereto, for security or safety at the site, nor for any failure of any contractor to comply with laws and regulations applicable to such contractor's furnishing and performing of its work. Engineer neither guarantees the performance of any contractor nor assumes responsibility for any contractor's failure to furnish and perform the work in accordance with the contract documents, which contractor is solely responsible for its errors, omissions, and failure to carry out the work. Engineer shall not be responsible for the acts or omissions of any contractor, subcontractor, or supplier, or of any of their agents or employees or any other person, (except Engineer's own agents, employees, and

consultants) at the site or otherwise furnishing or performing any work; or for any decision made regarding the contract documents, or any application, interpretation, or clarification, of the contract documents, other than those made by the Engineer.

- B. Provide the necessary base lines, benchmarks, and reference points to enable the Contractor to proceed with the work.
- C. Keep a daily record of the Contractor's work on those days that the Engineers are at the construction site including notations on the nature and cost of any extra work, and provide weekly reports to the Owner of the construction progress and working days charged against the Contractor's time for completion.

#### 5. SUBSTANTIAL COMPLETION OF PROJECT

- A. Provide construction inspection services when notified by the Contractor that the Project is substantially complete. Prepare written punch lists during substantial completion inspections.
- B. Prepare Certificate of Substantial Completion.

#### 6. PROJECT CLOSEOUT

- A. Provide construction inspection services when notified by the Contractor that the Project is complete. Prepare written punch lists during final completion inspections.
- B. Review the Contractor's written guarantees and issue a Notice of Acceptability for the Project by the Owner.
- C. Review the Contractor's requests for final payment, and advise the Owner of the amounts due and payable to the Contractor in accordance with the terms of the construction contract documents.
- D. Prepare construction record drawings which show field measured dimensions of the completed work which the Engineers consider significant and provide the Owner with CD or electronic copy within ninety (90) days of the Project completion.

#### 7. OPERATION & MAINTENANCE (O&M) MANUAL

- A. Meet with Owner staff to clarify scope of the O&M Manual and establish lines of communication, budget and schedule.
- B. Assemble and organize the operation and maintenance manuals that equipment manufacturers are required to submit.
- C. Complete IEPA Required Tasks, which include:
  - a. Attend equipment manufacturers/vendors' training sessions to verify that Rochelle staff received instruction on the proper operation and maintenance of the equipment and process units included in the project has been provided.
    - i. Use the "Manufacturer's Certificate of Inspection" form contained in Section 01 61 01 to document that the instruction was given and the Rochelle staff that received the instruction.

- ii. During each session, supplement the manufacturer's instructions, as necessary, to explain how the manufacturer's equipment fits into the overall treatment plant and control system.
    - iii. The Resident Project Representative (RPR) will be the engineer's employee who normally attends the equipment manufacturers/vendors' training sessions. Engineer's operation tech or designers may also attend sessions, when more expertise is beneficial to the Rochelle staff's understanding of the function, operation, and control of the equipment.
  - b. Assemble an operation and maintenance reference library, which will include, but is not limited to, the following:
    - i. Manufacturer's literature, shop drawings and warranties;
    - ii. Record Drawings showing process valves and valve numbers.
    - iii. A valve index in the form of a Microsoft Excel workbook. The valve index will list the valves and gates for the equipment and process units included in the project. The valve index will show valve and gate positions for each possible alternate flow configuration:
      - 1. Normal.
      - 2. Bypassing of individual treatment processes and units.
      - 3. Emergency conditions that could reasonably be expected to occur.
  - D. Excluded from these services is the preparation of a Facility O&M Manual or an amendment to the City's existing Facility O&M Manual.

## 8. START-UP AND TRAINING

- A. Provide an engineer or operation technician with a Class 1 wastewater treatment license to assist the City start-up the new treatment processes and to educate City staff on the design intent and proper operation of the plant.

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