

RESOLUTION No. 2014-3162

A RESOLUTION AUTHORIZING THE CITY MANAGER TO ENTER INTO A PROFESSIONAL SERVICES AGREEMENT WITH RH2 ENGINEERING, INC., TO PROVIDE DESIGN SERVICES FOR THE ON-SITE SODIUM HYPOCHLORITE GENERATION SYSTEM FOR AN AMOUNT NOT TO EXCEED \$88,037.00

RECITALS:

1. City staff solicited design services for the design of a hypochlorite generation system, an identified project as part of the Wastewater Treatment Plant (WWTP) Repair, Renovation, and Expansion (RRE) project, using the Direct Appointment Procedure (OAR 137-048-0200).
2. RH2 Engineering, inc. was determined to be qualified and a scope and fee was negotiated and agreed upon. The details of the scope for the services are described in Exhibit "A" which is hereby attached and by this reference incorporated. The RH2 Engineering, Inc. fee for these services is \$88,037.00.

THE CITY OF NEWBERG RESOLVES AS FOLLOWS:

1. The City Council does hereby authorize the city manager to negotiate and enter into a professional services agreement with RH2 Engineering, Inc. to provide design services for the On-site Hypochlorite Generation System for an amount not to exceed \$88,037.00.
2. The City Council authorizes the transfer from Fund 26 (Wastewater CIP Reserve Fund), in the amount of \$35,214.80; and from Fund 46 (Wastewater SDC Fund), in the amount of \$52,822.20, for a total of \$88,037.00 to Fund 4 (Proprietary Capital Projects Fund).

➤ **EFFECTIVE DATE** of this resolution is the day after the adoption date, which is: September 3, 2014.

ADOPTED by the City Council of the City of Newberg, Oregon, this 2nd day of September, 2014.


Sue Ryan, Interim City Recorder

ATTEST by the Mayor this 5th day of September, 2014.

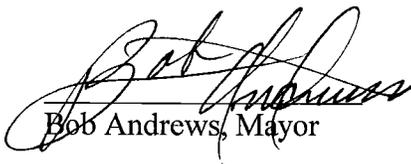

Bob Andrews, Mayor

Exhibit A

PROFESSIONAL SERVICES AGREEMENT

THIS AGREEMENT, made and entered into on this _____ day of _____, 20____, by and between the **City of Newberg**, a municipal corporation hereinafter called the "CLIENT," and the consulting firm RH2 Engineering, Inc., whose address is, 22722 29th Drive SE, Suite 210, Bothell, Washington 98021, at which work will be available for inspection, hereinafter called the "CONSULTANT."

PROJECT NAME: On-site Sodium Hypochlorite Generation Design and Services During Construction

WHEREAS, the Client deems it advisable to engage the professional services and assistance of a qualified professional consulting firm to do the necessary engineering work for the project.

WHEREAS, the Consultant operates in compliance with the statutes of the State of Oregon for registration of professional engineers, has a current valid corporate certificate from the State of Oregon or has a valid assumed name filing with the Secretary of State and that personnel to be assigned to the work required under this Agreement are qualified to perform the work to which they will be assigned, and that sufficient qualified personnel are on staff or readily available to the Consultant to staff this Agreement.

WHEREAS, the Consultant will perform the work set forth in this Agreement upon the terms and conditions set forth below and in the following Exhibits:

Exhibit A	Scope of Work
Exhibit B	Estimate of Time and Expense
Exhibit C	Schedule of Hourly Rates and Charges

NOW THEREFORE, in consideration of the terms, conditions, covenants and performances contained herein below, the parties hereto agree as follows:

SCOPE OF WORK

The Consultant shall perform the work described in **Exhibit A** which is attached hereto and incorporated into this Agreement. The Consultant shall make minor changes, amendments, or revisions in the detail of the work as may be required by the Client, provided those changes, amendments, or revisions do not affect the attached Estimate of Time and Expense. Such changes, amendments, or revisions shall not constitute "Extra Work" as related to the "Extra Work" section of this Agreement. To reduce redundancy in effort, the Consultant is entitled to rely on the accuracy and completeness of any data, information, or materials provided by the Client or others in relation to the work.

STANDARD OF CARE

The Consultant shall be held to the same standard of care as is ordinarily practiced by other similar design professionals in that discipline for comparable work provided in a similar locality.

DESIGN CRITERIA

The Client will designate the basic premises and criteria for the work needed. Reports and plans, to the extent feasible and reasonable, shall be developed in accordance with the latest edition and amendments of applicable local and State regulations, guidelines, and specifications.

OWNERSHIP OF PRODUCTS AND DOCUMENTS TO BE FURNISHED BY THE CONSULTANT

Ownership of the source files of any reports, data, studies, surveys, charts, maps, drawings, specifications, figures, photographs, memoranda, and any other documents which are developed, compiled, or produced by the Consultant as a result of this Agreement, whether or not completed, shall remain with the Consultant. Upon completion of the project, the Consultant shall provide the Client with tangible copies of the project documents in accordance with **Exhibit A**. The Consultant shall retain ownership of the source files and information developed by the Consultant in preparing the project documents. The Consultant shall provide the Client with electronic copies of the project documents, in accordance with **Exhibit A**, in any of the following formats: Adobe Portable Document Format (PDF), AutoCAD® Drawing Web Format (DWF) or JPEG (JPG). Any reuse of the project documents that is beyond the scope of the project is prohibited without written authorization from the Consultant.

The Client acknowledges the Consultant's plans and specifications are instruments of professional service. The Client agrees to hold harmless and indemnify Consultant against all claims made against Consultant for damage or injury, including defense costs arising out of any reuse of such plans and specifications by any third party.

Methodology, materials, software, logic, and systems developed under said Contract are the property of the Consultant, and may be used as the Consultant sees fit, including the right to revise or publish the same without limitation.

TIME OF BEGINNING AND COMPLETION

The Consultant shall not begin work under the terms of this Agreement until authorized in writing by the Client. If, after receiving Notice to Proceed, the Consultant is delayed in the performance of its services by factors that are beyond its control, the Consultant shall notify the Client of the delay and shall prepare a revised estimate of the time and cost needed to complete the Project and submit the revision to the Client for its approval. Time schedules are subject to mutual agreement for any revision unless specifically described as otherwise herein.

PAYMENT

The Consultant shall be paid by the Client for services rendered under this Agreement as provided hereinafter and as specified in **Exhibit B** and **Exhibit C**. Such payment shall be full compensation for work performed or services rendered and for all labor, materials, supplies, equipment, and incidentals necessary to complete the work. All billings for compensation for work performed under this Agreement will list actual time

Exhibit A

(days and/or hours) and dates during which the work was performed and the compensation shall be figured using the rates in **Exhibit C**. Payment for the work shown in **Exhibit A** shall not exceed \$88,037 without a written amendment to this contract, agreed to and signed by both parties. Payment for work stated in **Exhibit A** will be calculated based on the Consultant's hourly rates stated in **Exhibit C**.

Payment for extra work performed under this Agreement shall be paid as agreed to by the parties in writing at the time the extra work is authorized. (See "EXTRA WORK").

Finance charges, computed by a "Periodic Rate" of 1% per month, which is an annual percentage rate of 12% (applied to the previous month's balance after deducting payments and credits for the current month), will be charged on all past-due amounts unless otherwise provided by law or by contract. Invoices not paid within thirty (30) days will be considered past-due.

Acceptance of final payment by the Consultant shall constitute a release of claims related to payment under this Agreement which the Consultant may have against the Client unless such claims are specifically reserved in writing and transmitted to the Client by the Consultant prior to its acceptance.

The Consultant shall keep available for inspection by the Client, for a period of three (3) years after final payment, the cost records and accounts pertaining to this Agreement and items related to, or bearing upon, these records. If any litigation, claim or audit is started before the expiration of the three-year retention period, the records shall be retained until litigation, claims or audit findings involving the records have been resolved. The three-year retention period starts when the Consultant receives final payment.

CHANGES IN WORK

The Consultant shall make revisions and changes in the completed work of this Agreement as are necessary to correct the Consultant's errors, when required to do so by the Client, without additional compensation.

Should the Client find it desirable for its own purposes to have previously completed work or parts thereof revised, the Consultant shall make revisions, if requested and as directed by the Client in writing. This work shall be considered as "Extra Work" and will be paid for as provided in the Section "Extra Work."

EXTRA WORK

The Client may desire to have the Consultant perform work or render services in connection with the Agreement in addition to or other than work provided for by the expressed intent of the Scope of Work. Such work will be considered as Extra Work and will be specified in a written supplement which will set forth the nature and scope thereof. Work under a supplement shall not proceed until authorized in writing by the Client. Any dispute as to whether work is Extra Work or work already covered under this Agreement shall be mutually resolved by the parties before the work is undertaken.

EMPLOYMENT

The Consultant has not employed or retained any company or person, other than a bona fide employee working solely for the Consultant, to solicit or secure this contract, and has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the Consultant, any fee, commission, percentage, brokerage fee, gifts or any other consideration, contingent upon or resulting from the award or making of this contract.

Employees of the Consultant, while engaged in the performance of work or services required by the Consultant under this Agreement, shall be considered employees of the Consultant only and not of the Client, and claims that may or might arise under the Workman's Compensation Act on behalf of said employees, while so engaged in the work or services provided or to be rendered herein, shall be the obligation and responsibility of the Consultant.

The Consultant shall not engage on a full-time, part-time, or other basis, during the period of the contract, any professional or technical personnel who are, or have been at any time during the period of this contract, in the employ of the Client except regularly retired employees, without written consent of the Client.

The Consultant's relation to the Client shall be at all times as an independent contractor.

NONDISCRIMINATION

The Consultant will not discriminate against any person because of race, creed, color, national origin, gender, marital status, sexual orientation, age, or mental, emotional, or physical disability, except for a bona fide occupational qualification with regard to, but not limited to the following: employment; promotions; demotion or transfer; recruitment or any recruitment advertising; layoff or terminations; rates of pay or other forms of compensation; selection for training; and rendition of services. The Consultant is an equal opportunity employer.

TERMINATION OF AGREEMENT

Either Client or Consultant may terminate this Agreement by giving ten (10) days' written notice to the other party. In such event, the Client shall pay in full for all work previously authorized and performed prior to the effective date of termination. If no notice of termination is given, relationships and obligations created by this Agreement shall be terminated upon completion of applicable requirements of this Agreement.

DISPUTES

The parties shall make a good faith effort to resolve disputes concerning questions of facts in connection with work prior to initiating legal action. In the event that either party institutes legal action or proceedings to enforce any of its rights in this Agreement, both parties agree that any such action shall be brought in the courts of the State of Oregon, situated in Yamhill County.

Exhibit A

LEGAL RELATIONS

The Consultant shall comply with federal, state and local laws and ordinances directly applicable to the work to be done under this Agreement. This contract shall be interpreted and construed in accordance with the laws of Oregon.

The Consultant agrees to indemnify and hold harmless the Client, its officers and employees from claims, demands or suits at law or equity directly resulting from Consultant's negligent acts, errors, or omissions under this Agreement, provided that nothing herein shall require the Consultant to indemnify the Client against and hold harmless the Client from claims, demands, or suits resulting from the conduct of the Client, its officers or employees. Provided further, if the claims or suits are caused by or result from the concurrent negligence of (a) the Consultant, its agents, or employees, and (b) the Client, its agents, officers, or employees, this provision with respect to claims or suits based upon such concurrent negligence shall be valid and enforceable only to the extent of the Consultant's negligence or the negligence of the Consultant's agents or employees except as limited below.

The Consultant shall secure general liability, property damage, auto liability, and professional liability coverage in the amount of \$1.0 million, with a General Aggregate in the amount of \$2.0 million, unless waived or reduced by the Client. The Consultant shall submit to the Client a completed Standard ACORD Certification Form as proof of insurance. This Form shall name the Client as an additional insured for Consultant's applicable insurance policies.

All coverages provided by the Consultant shall be in a form and underwritten by a company acceptable to the Client. The Client will normally require carriers to have a minimum A.M. Best rating of A VII. The Consultant shall keep all required coverages in full force and effect during the life of this project, and a minimum of thirty (30) days' notice shall be given to the Client prior to the cancellation of any policy.

SUBLETTING OR ASSIGNING OF CONTRACTS

The Consultant shall not sublet or assign any of the work covered by this Agreement without the express consent of the Client.

COMPLETE AGREEMENT

This document and referenced attachments contain all covenants, stipulations, and provisions agreed upon by the parties. Any supplements to this Agreement will be in writing and executed and will become part of this Agreement. No agent or representative of either party has authority to make, and the parties shall not be bound by or liable for, any statement, representations, promise, or agreement not set forth herein. No changes, amendments, or modifications of the terms hereof shall be valid unless reduced to writing and signed by the parties as an amendment or "Extra Work" authorization to this Agreement.

The invalidity or unenforceability of any provision in this Agreement shall not affect the other provisions hereof, and this agreement shall be construed in all respects as if such invalid or unenforceable provision were omitted.

OREGON STATUTORY PROVISIONS

A condition or clause required by law to be in this Agreement shall be considered included by these references. ORS 279B.220, ORS 279B.225, ORS 279B.230, ORS 279B.235, ORS 279A.120, and ORS 279B.020 are incorporated herein by reference.

EXECUTION AND ACCEPTANCE

This Agreement may be simultaneously executed in several counterparts, each of which shall be deemed to be an original having identical legal effect.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first written above.

Tony V. Pardi

APPROVED SIGNATURE

APPROVED - SIGNATURE

Tony V. Pardi

PRINT NAME

PRINT NAME

President

TITLE

TITLE

7/23/14

DATE
RH2 Engineering, Inc., 22722 29th Drive SE, Suite 210, Bothell, WA 98021

DATE

City of Newberg, PO Box 970, Newberg, OR 97132

EXHIBIT A
Scope of Work
City of Newberg
Wastewater Treatment Plant
On-site Sodium Hypochlorite Generation
Design and Services During Construction

July 2014

BACKGROUND

The City of Newberg (City) currently uses chlorine gas for disinfection at its wastewater treatment plant (WWTP). Under current operating conditions (3.2 million gallons per day (MGD)), approximately 120 pounds per day of chlorine is required on average. Due to increased concern about the safety of using chlorine gas, the Facility Plan Update (2007) and the Preliminary Design Report (July 2012) identified the need to replace the existing chlorine gas chlorination system with an on-site 0.8-percent sodium hypochlorite generation (OSHG) system. According to these reports, preliminary sizing indicated that an OSHG system with a maximum capacity of 900 pounds per day may be required to treat future maximum day flows (15.5 MGD).

Because of the safety issues associated with chlorine gas, the City desires to accelerate the construction of the OSHG system and thus has requested an on-site sodium hypochlorite vendor (Vendor) prepare a preliminary design for the process/mechanical components of the project. The City has also re-examined the OSHG system sizing presented within the previous reports and has expressed concern that the OSHG system components may be oversized (based on current and near-term wastewater flows), which could result in increased operational and maintenance issues. For these reasons, the City desires that the OSHG system be designed with the flexibility to expand in the future if the City's wastewater flows increase. To accomplish this, the Vendor has proposed a 450 pound per day OSHG system which is expandable to 900 pounds per day, and which is identical to the OSHG system currently installed at the City's water treatment plant. The proposed OSHG system would also include two chemical tanks for storage of the 0.8-percent solution, as well as a third tank that could be used for storage of either 0.8-percent or 12.5-percent sodium hypochlorite, as well as other ancillary equipment. The 12.5-percent system would be designed as a backup system in case of emergency or planned OSHG equipment outage. The OSHG equipment is planned to be installed within the upper level of the return activated sludge (RAS) pump station within an area previously used for storage and dosing of soda ash for pH adjustment. A large pad-mounted brine tank is also planned to be installed outdoors between the RAS pump station and secondary clarifier.

To assist in the design and construction of the improvements, the City desires RH2 Engineering, Inc., (RH2) to provide the following services:

1. Review preliminary design prepared by other consultants and Vendor/City, review OSHG system sizing, and prepare a letter report to the Oregon Department of Environmental Quality (DEQ) documenting changes and recommendations for final design. Coordinate with the City and DEQ regarding concurrence on system sizing and preliminary design.
2. Prepare final design documents for construction and permitting. Coordinate with the City and DEQ during the regulatory approval process.

3. Provide on-call services during construction as necessary to respond to questions or changes in field conditions. Provide startup and testing services for system operation per the design, and prepare as-built drawings.

Following in this Scope of Work is a list of tasks RH2 will perform with objectives, approaches, deliverables, as well as information and participation needed from the City. Within each task, RH2 will perform project management, including staff scheduling, invoicing, record keeping and filing, and periodic coordination with the City to facilitate the project.

Assumptions: *The following assumptions were made in the preparation of this Scope of Work.*

- *The Vendor has completed preliminary design. RH2 will review and finalize the design of the OSHG system using the Vendor's preliminary design. Level of effort assumes critical design features selected by the Vendor (such as materials, equipment, approach, etc.) are properly sized and generally acceptable, and will not require redesign. Should the mechanical/process design require redesign, an amendment for additional design services will be mutually negotiated between the City and RH2.*
- *The City will be completing this work with sole source quotes from contractors and Vendors. As such, the bid documents will be more limited for requesting construction from individual contractors. The City will develop a construction contract and general conditions for the project. RH2 will coordinate with the City and Whitney Equipment (Vendor), as well as the City's electrical contractor and control system integrator (Mr. Don Best of HDR Engineering, Inc.) to prepare the design documents for construction and regulatory approval. RH2 will provide limited technical specifications that address the technical and installation requirements of non-Vendor supplied equipment and materials.*
- *The City will develop a sole source exemption letter for the project.*
- *The City will submit permit applications and pay all permit and plan review fees. No modifications will be required to the City's existing 1200-C permit.*
- *No geotechnical or survey services are included for this project.*
- *RH2 is entitled to rely on the accuracy and completeness of any data, information, or materials provided by the City, the Vendor, or others in relation to the work, including the City's as-built record drawings for the site, buried utilities, and existing structure. RH2 will not be conducting additional field investigations such as potholing or concrete testing or utility locates.*

SCOPE OF WORK

Task 1 – Preliminary Design Review and Project Letter Report

Objective: Review chlorination system sizing and prepare letter report and preliminary design submittal suitable for DEQ review and approval.

Approach:

- 1.1 Preliminary Design Review and Draft Project Letter Report: Review chlorination system sizing from previous engineering reports prepared by other consultants and preliminary design and supporting documentation prepared by City/Vendor. Prepare project letter report summarizing proposed chlorination system sizing and recommendations. Submit draft of letter report to City and DEQ for review.

Exhibit A

City of Newberg

WWTP On-site Sodium Hypochlorite Generation Design and SDC

Exhibit A

Scope of Work

- 1.2 Finalize Letter Report and QA\QC Review: Incorporate review comments from DEQ and the City and perform final internal quality assurance/quality control review. Finalize letter report.
- 1.3 Structural Analysis and Technical Memorandum: Review as-built record drawings and structural calculations (if available) of existing RAS pump station and secondary clarifier and perform structural analysis based on information provided to determine if existing structures are capable of supporting OSHG storage and brine tanks and equipment without modification. Prepare technical memorandum summarizing conclusions and submit to City. *Based on cursory review of existing structures and as-built records, it is presumed that the existing structures will be adequate to support the proposed loads. Design budget assumes no structural design will be required to modify the structure to support the storage tanks. If the structural analysis determines additional structural design is required, then a project amendment will be required.*
- 1.4 Oregon DEQ Coordination and Approval: Coordinate with the DEQ regional engineer at project initiation and throughout the review process for DEQ's approval of the letter report and final design, and respond to questions. *In general, it is assumed that the DEQ coordination and approval process will proceed as follows:*
 - *RH2 will contact DEQ at project initiation to discuss project and identify specific concerns or questions that should be addressed in letter report. Following this discussion, RH2 will coordinate with the City as necessary to address concerns (if any).*
 - *RH2 will prepare a draft letter report and submit to the City and DEQ concurrently. RH2 will respond to questions and prepare the final letter report.*
 - *RH2 will prepare design documents to the approximate 90-percent level and will submit final letter report and 90-percent design documents to the City and DEQ concurrently. (Completed under Task 2).*
 - *RH2 will respond to City and DEQ comments and will prepare final design documents for construction. (Completed under Task 2).*
 - *RH2 cannot warrant or guarantee DEQ's approval of the project.*

Provided by the City:

- 2007 Facility Plan Update in hard-copy or electronic (PDF) format.
- 2012 Preliminary Design Report in hard-copy or electronic (PDF) format.
- As-built record drawings of original WWTP construction and subsequent retrofits in electronic (TIFF or PDF) format.
- Historical wastewater flow and corresponding chlorine usage data.
- Vendor and City-prepared preliminary design and equipment submittal and sizing information.
- Survey drawing of WWTP in electronic (DWG) format.

RH2 Deliverables:

- One (1) preliminary project letter report.

- One (1) final project letter report.
- Technical memorandum regarding structural analysis of existing structures.

Task 2 – Final Design

Objective: Utilize the Vendor's preliminary equipment submittal and layout drawings, and prepare final design of the proposed improvements.

Approach:

- 2.1. Code Compliance Review: Evaluate existing building and proposed chlorination system, specifically, the backup 12.5-percent sodium hypochlorite system, to determine if improvements are recommended/required for fire code compliance. Assist the City in obtaining Fire Marshall approval for proposed improvements. *The project team understands that the existing building is not a publicly-accessed facility and is not subject to Americans with Disabilities Act (ADA) compliance, and assumes that no major building modifications will be required that would require further evaluation in terms of building code compliance. If additional design efforts are required due to code compliance review, additional discussions with the City will be held to determine the extent of additional design efforts.*
- 2.2. General Design: Prepare one (1) general design plan consisting of cover sheet, general notes, legends, and contact information.
- 2.3. Civil Design: Prepare up to two (2) civil design plans, sections, and details of the OSHG brine tank pad and associated site improvements. *It is assumed that the location selected by the City for the OSHG brine tank is adequate, free from conflicting utilities, and will not require any significant utility or site modifications.*
- 2.4. Chlorination System Design: Prepare up to five (5) mechanical design plans, sections and details of the OSHG and chemical feed systems. *This scope assumes that the chlorination system improvements will generally be confined to the upper floor of the RAS pump station and will include the connecting piping with the brine tank. RH2's design will include the chemical injection piping up and to the point where the piping exits the building. The City will be responsible for determining the routing requirements from the building to the injection point(s).*
- 2.5. Mechanical Design: Prepare up to two (2) mechanical design plans, sections, and details of the heating, ventilation, and air conditioning (HVAC) and plumbing modifications.
- 2.6. Electrical and Automatic Control Design: Prepare up to eight (8) electrical and control design plans, sections, and details including one-line diagram, power distribution and signal plan, and telemetry block diagrams detailing building power supply; electrical panel design; process and instrumentation control; and telemetry interface with the City's existing system. *It is assumed that RH2 will coordinate with the City's integrator who will be responsible for providing the supervisory control and data acquisition (SCADA) system integration and controls narrative and design.*
- 2.7. Technical Specifications: Prepare limited technical specifications to supplement Vendor-supplied specifications and quotations to describe technical and installation requirements for non-Vendor supplied equipment and materials. *Specifications would generally describe the following work elements: structural improvements, HVAC equipment, process piping and plumbing, and electrical and control improvements.*

- 2.8. 50-percent Design Submittal and Review Meeting: Submit a PDF electronic copy of the plans to the City at the 50-percent completion stage for the City's review. Attend one (1) meeting with the City to discuss review comments.
- 2.9. 90-percent Design Submittal and Review Meeting: Submit a PDF electronic copy of the plans and specifications to the City at the 90-percent completion stage for the City's review. Attend one (1) meeting with the City to discuss review comments.
- 2.10. Oregon DEQ Submittal: – Prepare a submittal package to DEQ, including final letter report, and 90-percent design plans and specifications.
- 2.11. Finalize Design and QA\QC Review: Incorporate review comments from DEQ and City and perform final internal QA/QC review. Finalize letter report.

RH2 Deliverables:

- PDF electronic copies of the 50-, 90-, and 100-percent completion design plans and specifications.

Task 3 – Services During Construction

Objective: Provide technical support during construction as requested by the City including: submittal review, on-site inspection, testing, and start-up observation to the level as provided for in the Fee Estimate. Should additional support be required, RH2 can prepare a contract amendment for these additional services.

Approach:

- 3.1. Construction Administration Support Services: Assist City staff throughout construction phase by providing on-going coordination and construction administration support services. This task assumes that construction administrative support services will be limited to a maximum of one (1) hour per week based on a twelve (12) week construction schedule with two (2) 4-hour on-site construction meetings/observation. Services will include project management, as well as regular communications and coordination between RH2 and City/contractor staff during construction, identify upcoming issues/needs, as well as the scheduling, coordination and administration of RH2 staff and resources. *It is assumed that the City will be primarily responsible for construction administration and processing contractor pay requests.*
- 3.2. On-Call Construction Technical Support Services: Provide on-call technical support services, including but not limited to: submittal and shop drawing review, on-site construction observation, responding to contractor's technical questions and requests for information (RFIs), and reviewing change orders. On-call services are intended to be technical in nature and are to be rendered only with City authorization. *It is assumed that the City will be responsible for daily construction observation, submittal review, and responding to contractor questions, etc. RH2's involvement will be determined based on the City's requests for support. The level of effort represented in the Fee Estimate is an estimate based on RH2's experience in providing on-call period support for similar projects. This task will be billed based on a time-and-materials, not-to-exceed basis for actual services rendered.*
- 3.3. Observe Startup and System Implementation: RH2 will observe the testing and startup of the chlorination system and its integration into the WWTP. RH2 will prepare the project acceptance letter to the City and for DEQ Construction Certification. *It is assumed that RH2 will perform one (1) site visit during startup to review testing and overall system integration.*

3.4. Construction Record Drawings: Prepare construction record drawings based on the contractor's redlined drawings.

City Deliverables: *It is assumed the City will perform the following tasks during construction.*

- Overall construction management and daily construction observation.
- Processing of contractor pay requests.
- Final completion and closeout of the contract with the Vendor and contractor.

RH2 Deliverables:

- Regular weekly communication and coordination with City and contractor (as needed)
- Site inspection and inspection reports (as requested).
- Written responses for shop drawings and submittals, RFIs, and change orders (as requested).
- One (1) site visit for startup and testing observation.
- Construction record (as-built) drawings in electronic (PDF) formats.

EXHIBIT B

City of Newberg

Wastewater Treatment Plant

On-site Sodium Hypochlorite Generation - Design and Services During Construction

Estimate of Time and Expense

	Description	Total Hours	Total Labor	Subconsultant	Total Expense	Total Cost
	Classification					
Task 1	Preliminary Design Review and Project Letter Report					
1.1	Prepare Preliminary Design Review and Draft Project Letter Report	40	\$ 6,544	\$ -	\$ 667	\$ 7,211
1.2	Finalize Letter Report and QA/QC Review	8	\$ 1,316	\$ -	\$ 41	\$ 1,357
1.3	Perform Structural Analysis and Prepare Technical Memorandum	20	\$ 3,264	\$ -	\$ 83	\$ 3,347
1.4	Coordinate with Oregon DEQ	8	\$ 1,608	\$ -	\$ 40	\$ 1,648
	Subtotal	76	\$ 12,732	\$ -	\$ 830	\$ 13,562
Task 2	Final Design					
2.1	Perform Code Compliance Review	12	\$ 1,796	\$ -	\$ 90	\$ 1,886
2.2	Prepare General Design Plans	11	\$ 1,859	\$ -	\$ 216	\$ 2,075
2.3	Prepare Civil Design Plans	26	\$ 4,290	\$ -	\$ 525	\$ 4,815
2.4	Prepare Chlorination System Design	80	\$ 13,440	\$ -	\$ 1,614	\$ 15,054
2.5	Prepare Mechanical Design	10	\$ 1,658	\$ -	\$ 211	\$ 1,869
2.6	Prepare Electrical and Automatic Control Design	60	\$ 9,120	\$ -	\$ 1,093	\$ 10,213
2.7	Prepare Technical Specifications	30	\$ 4,294	\$ -	\$ 345	\$ 4,639
2.8	Submit 50-Percent Design Submittal and Attend Review Meeting	4	\$ 804	\$ -	\$ 233	\$ 1,037
2.9	Submit 90-Percent Design Submittal and Attend Review Meeting	4	\$ 804	\$ -	\$ 233	\$ 1,037
2.10	Prepare Oregon DEQ Submittal	7	\$ 923	\$ -	\$ 219	\$ 1,142
2.11	Finalize Design and Perform QA/QC Review	24	\$ 4,008	\$ -	\$ 433	\$ 4,441
	Subtotal	268	\$ 42,996	\$ -	\$ 5,212	\$ 48,208
Task 3	Services During Construction					
3.1	Construction Administration Support Services	20	\$ 4,020	\$ -	\$ 290	\$ 4,310
3.2	On-Call Construction Technical Support Services	84	\$ 11,924	\$ -	\$ 622	\$ 12,546
3.3	Observe Startup and System Implementation	32	\$ 5,432	\$ -	\$ 325	\$ 5,757
3.4	Construction Record Drawings	20	\$ 3,096	\$ -	\$ 557	\$ 3,653
	Subtotal	156	\$ 24,472	\$ -	\$ 1,795	\$ 26,267
Subtotal Wastewater Treatment Plant Tasks		500	\$ 80,200	\$ -	\$ 7,837	\$ 88,037
PROJECT TOTAL		500	\$ 80,200	\$ -	\$ 7,837	\$ 88,037

**EXHIBIT C
RH2 ENGINEERING, INC.
SCHEDULE OF RATES AND CHARGES**

2014 HOURLY RATES

CLASSIFICATION		RATE	CLASSIFICATION		RATE
Professional	IX	\$209.00	Technician	IV	\$135.00
Professional	VIII	\$209.00	Technician	III	\$127.00
Professional	VII	\$201.00	Technician	II	\$95.00
			Technician	I	\$90.00
Professional	VI	\$186.00			
Professional	V	\$177.00	Administrative	V	\$126.00
Professional	IV	\$167.00	Administrative	IV	\$105.00
			Administrative	III	\$91.00
Professional	III	\$157.00	Administrative	II	\$75.00
Professional	II	\$147.00	Administrative	I	\$63.00
Professional	I	\$135.00			

IN-HOUSE SERVICES

In-house copies (each)	8.5" X 11"	\$0.09	CAD Plots	Large	\$25.00
In-house copies (each)	8.5" X 14"	\$0.14	CAD Plots	Full Size	\$10.00
In-house copies (each)	11" X 17"	\$0.20	CAD Plots	Half Size	\$2.50
In-house copies (color) (each)	8.5" X 11"	\$0.90	CAD System	Per Hour	\$27.50
In-house copies (color) (each)	8.5" X 14"	\$1.20	GIS System	Per Hour	\$27.50
In-house copies (color) (each)	11 X 17"	\$2.00	Technology Charge	2.5% of Direct Labor	
			Mileage	Current IRS Rate	

OUTSIDE SERVICES

Outside direct costs for permit fees, reports, maps, data, reprographics, couriers, postage, and non-mileage related travel expenses that are necessary for the execution of the project and are not specifically identified elsewhere in the contract will be invoiced at cost.

All Subconsultant services are billed at cost plus 15%.

CHANGES IN RATES

Rates listed here are adjusted annually. The current schedule of rates and charges is used for billing purposes. Payment for work accomplished shall be based on the hourly rates and expenses in effect at the time of billing as stated in this Exhibit.