



## RESOLUTION No. 2016-3325

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**A resolution to authorize the city manager to enter into a professional services agreement with HDR Engineering, Inc. to design the city's WWTP Oxidation Ditch Rehabilitation Project**

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### RECITALS:

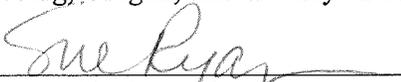
1. The City of Newberg Wastewater Treatment Plant (WWTP) has two oxidation ditches, constructed in 1985, that provide an essential role in aerobic digestion for year-round wastewater treatment.
2. Cracks in concrete have developed at the floor, inclined slabs and divider walls of both oxidation ditches and the city will provide rehabilitation for the oxidation ditches over several fiscal years. This project will address the needed repairs to Oxidation Ditch No. 2.
3. City staff received one qualified proposal from HDR Engineering, Inc. (HDR) after advertising the Request for Proposals (RFP) in the Daily Journal of Commerce and the city's website.
4. HDR submitted a detailed proposal outlining the scope of work with a phase-by-phase cost breakdown in line with the scope of work included in Exhibit "A" (with the professional services agreement) and by this reference incorporated.

### THE CITY OF NEWBERG RESOLVES AS FOLLOWS:

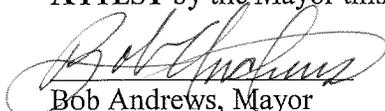
1. The City Council, acting as contract review board for the city, does hereby authorize the City Manager to enter into a Professional Services Agreement with HDR Engineering, Inc. to complete the city's Oxidation Ditch Rehabilitation Project that includes detailed structural evaluation, engineering design, bid and construction phase services for Oxidation Ditch No. 2 in the amount of \$215,171.00.
2. The City Attorney will modify and approve all contracts and agreements as to form and content.
3. The City Manager is authorized to amend the Professional Services Agreement up to ten (10) percent of the original contract amount.

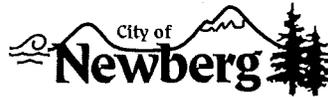
➤ **EFFECTIVE DATE** of this resolution is the day after the adoption date, which is: September 20, 2016.

**ADOPTED** by the City Council of the City of Newberg, Oregon, this 19<sup>th</sup> day of September, 2016.

  
Sue Ryan, City Recorder

**ATTEST** by the Mayor this 22<sup>th</sup> day of September, 2016.

  
Bob Andrews, Mayor



## AGREEMENT WITH HDR ENGINEERING, INC. TO PROVIDE CONSULTING SERVICES TO THE CITY OF NEWBERG

THIS AGREEMENT is entered into this \_\_\_\_\_ day of September, 2016 by and between the City of Newberg, a municipal corporation of the State of Oregon, hereinafter called **City**, and

HDR Engineering, Inc.  
1001 SW 5<sup>th</sup> Avenue, Suite 1800  
Portland, OR 97204  
Phone: 503.423.3700 Fax: 503.423.3737  
Email: Verena.Winter@hdrinc.com

hereinafter called **Consultant**.

### RECITALS:

1. **City** has need for the services of a **Consultant** to complete the City's WWTP Oxidation Ditch Rehabilitation Project that includes engineering evaluation, design, bid and construction phase services.
2. By authority of ORS 279C.110, and through the Request for Proposals (RFP) process, the **City** received one qualified proposal and entered into Agreement with the **Consultant** based on their particular training, ability, knowledge, expertise and experience. The Agreement was approved by the City Council on September 19, 2016 per Resolution No. 2016-3325.

**NOW THEREFORE**, in consideration of mutual promises, covenants and agreements of the parties, it is agreed as follows:

1. **Effective Date and Duration:** This Agreement shall become effective on the date that this Agreement has been signed by every party hereto.

Unless, terminated or extended, this Agreement shall expire when the **City** accepts **Consultant's** completed performance or on June 29, 2018, whichever date occurs first. This fact notwithstanding, the services of **Consultant** shall be authorized and paid on a task by task basis as described in Exhibit "A".

Expiration shall not extinguish or prejudice **City's** right to enforce this Agreement with respect to any breach of a **Consultant** warranty or any fault or defect in **Consultant's** performance that has not been cured.

2. **Termination:** This Agreement may be terminated at any time by mutual, written consent of the parties. The **City** may, at its sole discretion terminate this Agreement in whole or part upon a 30-day written notice to **Consultant**. The **City** may terminate immediately upon notice to the **Consultant** that the **City** does not have funding, appropriations, or other necessary expenditure authority to pay for **Consultant's** work. The **City** may terminate Agreement at any time for material breach, unless **Consultant** has cured such defect or deficiency within a reasonable period of time following notice of such claim.

3. **Scope of Work:** The **Consultant** agrees to provide the services provided in the Scope of Work which is Exhibit "A" and is attached hereto and incorporated by this reference. The **Consultant** represents and warrants to the **City** that the **Consultant** can perform the work outlined in the Scope of Work for the fee proposal amount.

4. **Compensation:** The **Consultant** agrees to perform the work for a not-to-exceed fee as indicated in their professional fee proposal included in the Scope of Work. The not-to-exceed figure is as follows:

**\$215,171.00**

The **Consultant** shall not exceed the fee for any task included in the fee proposal amount. If the **Consultant** foresees that the fee is going to exceed the not-to-exceed figure because the task has changed or is outside the scope, the **Consultant** shall notify the **City** in writing of the circumstances with an estimated amount that the fee is to be exceeded. The **Consultant** shall obtain written permission from the **City** before exceeding the not-to-exceed fee amount. If the **Consultant** does work that exceeds the maximum fee amount prior to obtaining the written permission, the **Consultant** waives any right to collect that fee amount.

5. **Additional Work Not Shown within the Scope of Work:** If **City** requests or requires work to be done not

within the Scope of Work of this project, the **Consultant** shall notify the **City** of such work, provide an estimated fee amount, and obtain written instructions to proceed with work in the form of an Agreement amendment prior to proceeding with work and incurring any costs on behalf of the **City**. If **Consultant** proceeds with work prior to obtaining permission and/or Agreement amendment, the **Consultant** waives any right to collect fees for work performed.

6. **Agreement Documents:** This Agreement consists of the following documents which are listed in descending order of preference: This Agreement, and Attached Exhibits. Work is under the sole control of **Consultant**; however, the work contemplated herein must meet the approval of the **City** and shall be subject to **City's** general right of inspection and supervision to secure the satisfactory performance thereof.

7. **Benefits:** **Consultant** will not be eligible for any federal social security, state workers compensation, unemployment insurance, or public employees' retirement system benefits from the Agreement payment except as a self-employed individual.

8. **Federal Employment Status:** In the event any payment made pursuant to this Agreement is to be charged against federal funds, **Consultant** certifies that he or she is not currently employed by the federal government and the amount charged does not exceed his or her normal charge for the type of services provided.

9. **Consultant's Warranties:** The work to be performed by **Consultant** includes services generally performed by **Consultant** in his/her usual line of business. The work performed by the **Consultant** under this Agreement shall be performed in a good and businesses-like manner in accordance with professional standards. The **Consultant** shall, at all times, during the term of this Agreement, be qualified, be professionally competent, and duly licensed to perform the work.

10. **Indemnity:** **Consultant** shall indemnify and hold harmless **City** from and against all liability or loss and against all claims, suits, actions, losses, damages, liabilities, costs, and reasonable expenses of any nature whatsoever to the extent caused by the negligent acts, errors, omissions, or performance of services of the **Consultant**, or its officers, employees, subcontractors, or agents under this Agreement.

11. **Independent Contractor:** **Consultant** is not currently employed by the **City**. The parties to this Agreement intend that the **Consultant** perform all work as an Independent Contractor. No agent, employee, or servant of **Consultant** shall be or shall be deemed to be the employee, agent or servant of **City**. **City** is interested only in the results obtained under this Agreement; the manner and means of conducting the work are under the sole control of **Consultant**, however, the work contemplated herein must meet the approval of the **City** and shall be subject to **City's**

general right of inspection and supervision to secure the satisfactory performance thereof.

12. **Taxes:** **Consultant** will be responsible for any federal or state taxes applicable to payments received under this Agreement. **City** will report the total of all payments to **Consultant**, including any expenses, in accordance with the Federal Internal Revenue Service and the State of Oregon Department of Revenue regulations.

13. **Insurance:**

a) **Consultant**, its Subconsultants, if any, and all employers working under this agreement are subject employers under the Oregon Workers Compensation Law and shall comply with ORS 656.017, which requires them to provide workers compensation coverage for all their subject workers; or by signing this Agreement, **Consultant** represents that he or she is a sole proprietor and is exempt from the laws requiring workers compensation coverage.

b) **Consultant** will, at all times, carry a Commercial General Liability insurance policy for at least \$2,000,000.00 combined single limits per occurrence for Bodily Injury, Property Damage, and Personal Injury. The **City**, its agents, employees and officials all while acting within their official capacity as such, shall be named as an additional insured on the insurance specified in this paragraph.

c) **Consultant** will, at all times, carry a Professional Liability/Errors and Omission type policy with limits of at least \$2,000,000.00. If this policy is a "claims made" type policy, the policy type and company shall be approved by the City Manager prior to commencement of any work under this Agreement.

d) **Consultant** shall furnish the **City** with Certificates of Insurance upon execution of Agreement. Such Certificates of Insurance evidencing any policies required by this Agreement shall be delivered to the **City** prior to the commencement of any work. A 30-day notice of cancellation clause shall be included in said certificate. The **City** has the right to reject any certificate for unacceptable coverage and/or companies.

14. **Assignment:** The parties hereto each bind themselves, their partners, successors, assigns and legal representatives of such other party in respect to all terms of this Agreement. Neither party shall assign the Agreement as a whole without written consent of the other.

15. **Ownership of Work Product:** All original documents prepared by **Consultant** in performance of this Agreement, including but not limited to original maps, plans, drawings and specifications are the property of **City** unless otherwise agreed in writing. Quality reproducible records copies of final work product, including digital files of text and drawings shall be provided to **City** at the conclusion or termination of this Agreement. **City** shall indemnify and hold harmless **Consultant** and **Consultant's** independent professional associates or Subconsultants from all claims, damages, losses and expenses including

attorney fees arising out of the City's use of any instruments of professional service for purposes outside the scope of this Agreement.

16. **Entire Agreement:** This Agreement constitutes the entire Agreement between the parties and supersedes all prior agreements, written and oral, courses of dealing, or other understanding between the parties. No modification of this Agreement shall be binding unless in writing and signed by both parties.

17. **Notification:** All correspondence and notices

related to this Agreement shall be directed to the project manager for the party to whom the correspondence or notice is intended. If directed to the City: City of Newberg, P.O. Box 970, Newberg, Oregon 97132, Attn: Paul Chiu, P.E., Project Manager, [Paul.Chiu@newbergoregon.gov](mailto:Paul.Chiu@newbergoregon.gov). If directed to the Consultant: Attn: Verena Winter, P.E., Project Manager at the address listed above. Each party shall be responsible for notifying the other of any changes in project manager designation.

IN WITNESS WHEREOF, the parties have executed this Agreement on the date first above mentioned.

**CONSULTANT**

**CITY OF NEWBERG**

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

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

Name: \_\_\_\_\_

Name: Joe Hannan

Title: \_\_\_\_\_

Title: City Manager

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

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

*Engineering Services Approval:*

\_\_\_\_\_  
Kaaren L. Hofmann Date  
City Engineer

*Department Approval:*

\_\_\_\_\_  
James (Jay) O. Harris Date  
Public Works Director

*Approved as to Form and Content:*

\_\_\_\_\_  
Truman A. Stone Date  
City Attorney

Scope of Work  
WWTP Oxidation Ditch Rehab Project  
for City of Newberg, OR  
HDR Engineering, Inc.

## BACKGROUND

The City of Newberg WWTP has two oxidation ditches and one equalization basin, all constructed in 1985. The oxidation ditches provide an essential role in aerobic digestion of year-round wastewater treatment. The treatment plant operates both oxidation ditches in the winter. During summer, only one oxidation ditch is needed and the other one is emptied for maintenance.

Cracks in concrete have developed at the floor, inclined slabs and divider walls of both oxidation ditches. Structural inspection and evaluation of Oxidation Ditch No. 2 was performed on September 28, 2012. The objective of this project is to provide an updated structural evaluation of Oxidation Ditch No. 2 and to prepare a complete set of bid plans, specifications and rehab cost estimates that will extend the service life of Oxidation Ditch No. 2 for another 20 years.

This scope includes the following tasks:

## TASK 1 PROJECT MANAGEMENT

### Activities

- Prepare an internal project management plan to include schedule, budget, roles, project team contact information, and procedures.
- Prepare monthly invoices
- Prepare monthly progress reports to advise City project manager of project status.
- Conduct internal team meetings to review progress, coordinate disciplines, and identify information needs.
- Participate in a kickoff meeting to achieve the following:
  - Define project goals
  - Outline project and management approach
  - Identify roles and responsibilities
  - Confirm scope and schedule
  - Request data
  - Site tour of Oxidation Ditch No. 2
    - Observe and document existing conditions
    - Conduct representative hammer sounding of concrete floor and walls
    - Identify areas to focus field testing efforts

- Prepare an inspection report based on field observations conducted during site tour. Inspection report will include site photographs and summarize structural observations including results of the hammer sounding efforts.

### **Assumptions**

- Project duration is 14 months
- Kickoff meeting will include a site tour of Oxidation Ditch No. 2
- Kickoff meeting will be attended by Project Manager, Structural Engineer, Geotechnical Engineer and Constructability/Cost Estimator
- City will provide access to Oxidation Ditch No. 2
- Draft agendas will be submitted at least one (1) business day prior to meetings, except for deliverable review meetings which will be submitted five (5) business days prior to meetings
- Draft meeting minutes will be distributed within five (5) business days of the meeting date.
- Project deliverables will be submitted in electronic, PDF format unless otherwise indicated

### **Deliverables**

- Monthly invoices and progress reports
- Kickoff meeting agenda and minutes
- Data request
- Inspection Report (PDF)

## **TASK 2 FIELD TESTING**

### **Activities**

- Compile and review existing information on facilities, including record drawings, plant data and geotechnical information
- Prepare an exploration plan and submit it to City for review
- Perform a ground penetrating radar (GPR) survey using a GSSI SIR 3000 ground penetrating radar (or equivalent) at approximately 1 foot grids along the accessible areas of the oxidation basin to detect voids beneath the concrete.
- Perform focused GPR measurements at spacings of less than approximately 1 foot in select areas of interest based on our field observations and the initial GPR survey.
- Submit a public utility locate request (One-call) and coordinate drilling.
- Perform 4 to 6 concrete cores in select locations in the oxidation basin and submit the samples for testing to an A2LA certified laboratory to perform compressive testing in general accordance with ASTM C39. A minimum of two concrete cores will be performed at the base of the oxidation basin, and a minimum of two concrete cores will be performed on the sloped sides of the basin in areas of concrete distress.
- Perform drive probe explorations at up to 6 locations using a hand-held drive probe; 2 to 4 of the drive probes will be performed through the concrete cores in the side or bottom of the oxidation basin near existing concrete distress, and 1 to 2 will be located outside the ditch

for comparison. These explorations will be used to assess the relative resistance of the soils in these different locations.

- Perform 4 geotechnical borings using a portable geotechnical drill rig and advance the borings to depths of 10 to 25 feet below ground surface, and prepare a field log of the observed soil conditions; obtain appropriate soil samples for laboratory testing, if necessary. Two borings will be performed at the bottom of the basin, and two borings will be performed near the top of the basin, just outside of the footprint of the structure.
- Field-measure locations for corings, probes, and borings, relative to existing facilities, hand-place the locations on drawings; no surveys or GPS measurements, or drafting of locations will be done.
- Input the hand-written field logs into computer gINT software and review the soil samples and soil descriptions in the laboratory.
- Provide a discussion of the site geology and previous investigations performed at the site.
- Prepare exploration logs, summarize the findings from our explorations, and compare the soils at the oxidation basin to the soils at other locations across the site.
- Prepare a draft and final geotechnical report summarizing the GPR investigation, field explorations, and lab testing results, and prepare a discussion on possible causes of the concrete settlement and cracking.

### **Assumptions**

- City will provide information on existing facilities including record drawings, plant data and geotechnical information
- The City of Newberg will provide access to the oxidation ditches.
- The GPR investigation will require five (5) consecutive days of access to Oxidation Ditch No. 2
- Concrete coring and geotechnical boring activities will require five (5) consecutive days of access to Oxidation Ditch No. 2
- Shannon & Wilson will call in utility locate request, City is responsible for locating City utilities in the vicinity of the proposed explorations.
- Contaminated soil will not be encountered and the spoils from the excavation can be left on-site as directed by the City away from the oxidation ditches.
- The borings performed in the oxidation basin slab will be backfilled with bentonite chips, and the hole will be patched with concrete or epoxy grout. Prior to backfilling and patching, concrete will be removed from between existing rebar so that new rebar can be spliced to support the concrete/grout patch.
- There are no prevailing wage requirements on the project.

### **Deliverables**

- Exploration Plan
- Draft and Final Geotechnical Memo

## **TASK 3 ALTERNATIVES ANALYSIS**

### **Activities**

- Development of Solutions: Review results of field testing and prepare a matrix of potential solutions to be considered for rehabilitation of Oxidation Ditch No. 2. The matrix will include a list of the different types of damage identified in Oxidation Ditch No. 2 as well as a list of different repair methods for consideration.
- Constructability and Cost Review: Review matrix of potential solutions. Prepare a cost opinion and constructability review for each repair method. Cost opinions will be provided in the form of unit price. The constructability review will include a contractor's opinion on the suitability of a particular repair method for a particular type of damage.
- Alternatives Analysis: Develop a maximum of three (3) rehabilitation alternatives for Oxidation Ditch No. 2 based on the matrix of solutions and the results of the constructability and cost review. Each rehabilitation alternative is anticipated to include a combination of repair methods to address different types of damage observed in Oxidation Ditch No. 2. The following information will be included for each rehabilitation alternative:
  - Cost estimate
  - Constructability review
  - Construction schedule
  - Estimated impacts to service life
  - Operations and maintenance considerations

Summarize the alternatives analysis in an Alternatives Analysis Technical Memorandum and include a recommendation for a preferred alternative.

- Participate in an Alternatives Analysis Workshop with City to review the document and verify preferred alternative. Document condition assessment activities in a Technical Memorandum (TM).

### **Assumptions**

- Repair methods are intended to extend the service life of Oxidation Ditch No. 2 for another 20 years
- Cost estimates will be Class 4 based on Association for the Advancement of Cost Engineering [AACE] 18R-97
- Rehabilitation alternatives are anticipated to include one or more repair methods
- Alternatives Analysis Workshop will last 2 hours (excluding travel time) and be attended by Project Manager, Structural Engineer, Geotechnical Engineer and Constructability/Cost Estimator.
- The City will provide one set of consolidated comments for its review of the Draft Alternatives Analysis TM.
- The agreed upon preferred alternative will be further developed in Task 4 – Design Development
- The Alternatives Analysis TM will be based upon visual observation, field testing and best professional judgment.

### **Deliverables**

- Matrix of solutions
- Cost estimates and constructability opinion for each repair method
- Draft Alternatives Analysis Technical Memorandum
- Alternatives Analysis Workshop agenda and meeting minutes
- Final Alternatives Analysis Technical Memorandum

## **TASK 4 DESIGN DEVELOPMENT**

### **Activities**

- 30% Design: Develop 30% complete construction plans. The design will be developed with enough detail to include preliminary site layout showing location of repairs. 30% package will include a preliminary Table of Contents for the technical specifications. The 30% submittal will be reviewed in a workshop setting.
- 60% Design: Develop 60% complete construction plans. The design will be developed with enough detail to include preliminary site layout showing location of repairs and will include preliminary details on specific repair methods. 60% package will include preliminary technical specifications. The 60% submittal will be reviewed in a workshop setting.
- 90% Design: Develop 90% complete construction plans. The design will be further developed to include site layout showing location of repairs and will include details on specific repair methods. 90% package will include technical specifications. The 90% submittal will be reviewed in a workshop setting.

### **Assumptions**

- Design review workshops will be 2 hours (excluding travel time) and attended by Project Manager and Structural Engineer
- Design review workshops will be held in City facilities in Newberg, OR
- City will provide one consolidated set of review comments for each deliverable
- Revised submittals will not be issued for the 30%, 60% and 90% submittals. Revisions to submittals will be addressed incorporated into subsequent submittals.

### **Deliverables**

- Review meeting agenda and meeting minutes
- 30% Drawings and Table of Contents for Technical Specifications (electronic submittal in PDF), Class 3 AACE cost estimate
- 60% Drawings and 60% Technical Specifications (electronic submittal in PDF), Class 2 AACE cost estimate
- 90% Drawings and 60% Technical Specifications (electronic submittal in PDF), Class 1 AACE cost estimate
- Final drawings and specifications (electronic submittal in PDF)

## **TASK 5 BID AND CONSTRUCTION PHASE SERVICES**

### **Activities**

- Bid Phase: Provide technical support to City in answering formal questions and addressing comments from bidders regarding the project and bid package. Project Manager and Structural engineer will participate in one (1) pre-bid meeting to discuss the project with prospective bidders and address questions.
- Construction Phase: Provide responses to specific issues that arise in the field that cannot otherwise be resolved. These responses will be addressed through Submittal reviews, RFIs and Change Order reviews. Project Manager and structural engineer will attend one (1) pre-construction meeting to discuss the project with contractor and address questions. Project Manager, structural engineer and geotechnical engineer will participate in a maximum of four (4) site visits during construction including final construction walk-through.

### **Assumptions**

- The formal preparation of one (1) bid package addendum is included in this scope of work.
- City will be responsible for advertising and reproducing the construction package.
- Engineer will not act as the construction engineer on site. Engineer will be on site on as requested by City. City will provide daily inspections during construction.
- City will review Contractor pay applications.
- Twenty (20) RFI reviews at 2 hours per RFI (40 hrs)
- Twenty (20) submittal reviews at 4 hours per submittal (80 hrs)
- Two (2) change order reviews at 6 hours per Design Modification (12 hrs)
- City will provide redline as-built drawings for use in developing record drawings

### **Deliverables**

- Electronic copy of written responses to bidder questions regarding bid package
- Bid package addendum (electronic submittal in PDF)
- Electronic copy of written responses to contractor questions from pre-construction meeting
- Formal responses to a maximum of twenty (20) RFI reviews
- Formal responses to a maximum of twenty (20) submittal reviews
- Formal responses to a maximum of two (2) design modifications
- Punch list from final construction walk-through submitted in Excel format
- Record drawings (electronic submittal in PDF format)

Scope of Work  
WWTP Oxidation Ditch Rehab Project  
for City of Newberg, OR  
HDR Engineering, Inc.

Fee Summary

Task 1 – Project Management:	\$24,486
Task 2 – Field Testing:	\$43,563
Task 3 – Alternatives Analysis:	\$44,961
Task 4 – Design Development:	\$63,679
<u>Task 5 – Bid &amp; Construction:</u>	<u>\$38,482</u>
TOTAL	\$215,171