

1 **RESOLUTION NO. 1114**

2 **A RESOLUTION AUTHORIZING THE AWARD OF A**  
3 **CONTRACT FOR THE SEWAGE TREATMENT PLANT**  
4 **CAPACITY AND LOCAL LIMITS STUDY**

5 **WHEREAS**, during the summer of 1993, the Sewage Treatment Plant on several occasions  
6 failed to meet discharge standards established by the Department of Environmental Quality  
7 (DEQ) in our National Pollution Discharge Elimination System (NPDES) permit; and

8 **WHEREAS**, DEQ has evaluated data from the Sewage Treatment Plant and concluded that the  
9 possible reason for our difficulties is loading, beyond that expected from a population of about  
10 10,000, which may exceed the capacity of certain plant processes; and

11 **WHEREAS**, the City has budgeted funds in this fiscal year to conduct a capacity and local  
12 limits study to determine if any plant processes need to be upgraded and also if local limits  
13 should be imposed on any of our non-domestic dischargers; and

14 **WHEREAS**, the City invited seventeen consultant firms to indicate their interest in, and  
15 qualifications for, performing such a study, and seven firms responded; and

16 **WHEREAS**, City staff narrowed the list of firms to three, who were then asked to submit  
17 formal proposals; and

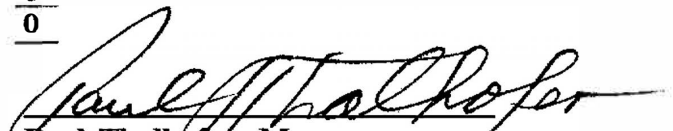
18 **WHEREAS**, proposals were evaluated and the firm of CH2M Hill submitted the proposal  
19 which best meets the needs of the City.

20 **NOW, THEREFORE, BE IT RESOLVED BY THE COMMON COUNCIL OF THE CITY**  
21 **OF TROUTDALE THAT:**

22 The Mayor is authorized to enter into a contract with CH2M Hill to perform a capacity and local  
23 limits study for the sewage treatment plant.

24 **ADOPTED BY THE COMMON COUNCIL OF THE CITY OF TROUTDALE THIS 9TH**  
25 **DAY OF AUGUST, 1994.**

26 YEAS: 5  
27 NAYS: 0  
28 ABSTAINED: 0

29   
30 Paul Thalhofer, Mayor  
31 Dated: August 10, 1994

32 **ATTEST:**  
33   
34 George Martinez  
35 Deputy City Recorder

**CH2MHILL STANDARD AGREEMENT FOR PROFESSIONAL SERVICES**

CH2M HILL's Office Address 825 NE Multnomah, Suite 1300 Portland, OR 97232

Project Name CAPACITY AND LOCAL LIMITS STUDY CH2M HILL Project No. OPW36177.CL

CLIENT City of Troutdale

Address 104 SE Kibling Street Troutdale, OR 97060-2099

CLIENT requests and authorizes CH2M HILL to perform the following services:

SCOPE: SEE ATTACHMENT 1

COMPENSATION by CLIENT to CH2M HILL will be on the basis of a lump sum not to exceed the amount of \$33,904 (thirty-three thousand nine hundred four dollars) based on the scope of work presented in Attachment 1, unless there is a change in the scope.

When compensation is on a cost-reimbursable basis, a service charge of 10 percent will be added to Direct Expenses. All sales, use, value added, business transfer, gross receipts, or other similar taxes will be added to CH2M HILL's compensation when invoicing CLIENT.

OTHERTERMS: See Addendum to this contract.

Services covered by this AGREEMENT will be performed in accordance with the Provisions and any attachments or schedules. This AGREEMENT supersedes all prior agreements and understandings and may only be changed by written amendment executed by both parties.

Approved to CLIENT

By *Paul J. Halhofer*  
Title Mayor

Date 8-11-94

Accepted for CH2M HILL \_\_\_\_\_, INC.

By *Jim Macariello*  
Title Water Business Line Manager

Date July 29, 1994

# PROVISIONS

## 1. Authorization to Proceed

Execution of this AGREEMENT by CLIENT will be authorization for CH2M HILL to proceed with the work, unless otherwise provided for in this AGREEMENT.

## 2. Salary Costs

CH2M HILL's Salary Costs, when the basis of compensation, are the amount of wages or salaries paid CH2M HILL employees for work directly performed on the PROJECT plus a percentage applied to all such wages or salaries to cover all payroll-related taxes, payments, premiums, and benefits.

## 3. Per Diem Rates

CH2M HILL's Per Diem Rates, when the basis of compensation, are those hourly or daily rates charged for work performed on the PROJECT by CH2M HILL employees of the indicated classifications. These rates are subject to annual calendar year adjustments and include all allowances for salary, overheads, and fee, but do not include allowances for Direct Expenses.

## 4. Direct Expenses

CH2M HILL's Direct Expenses are those necessary costs and charges incurred for the PROJECT including, but not limited to: (1) the direct costs of transportation, meals and lodging, mail, sub-contracts and outside services; special CLIENT approved PROJECT specific insurance, letters of credit, bonds, and equipment and supplies; (2) CH2M HILL's current standard rate charges for direct use of CH2M HILL's vehicles, computing systems, laboratory test and analysis, word processing, printing and reproduction services, and certain field equipment; and (3) CH2M HILL's standard project charges for special health and safety requirements of OSHA and telecommunications services.

## 5. Cost Opinions

Any cost opinions or PROJECT economic evaluations provided by CH2M HILL will be on a basis of experience and judgment, but, since CH2M HILL has no control over market conditions or bidding procedures, CH2M HILL cannot warrant that bids, ultimate construction cost, or PROJECT economics will not vary from these opinions.

## 6. Standard of Care

The standard of care applicable to CH2M HILL's services will be the degree of skill and diligence normally employed by professional engineers or consultants performing the same or similar services at the time CH2M HILL's services are performed. CH2M HILL will reperform any services not meeting this standard without additional compensation.

## 7. Termination

This AGREEMENT may be terminated for convenience on 30 days' written notice, or for cause, if either party fails substantially to perform through no fault of the other and does not commence correction of such nonperformance within 5 days of written notice and diligently complete the correction thereafter. On termination, CH2M HILL will be paid for all authorized work performed up to the termination date plus termination expenses, such as, but not limited to, reassignment of personnel, subcontract termination costs, and related closeout costs. If no notice of termination is given, relationships and obligations created by this AGREEMENT will be terminated upon completion of all applicable requirements of this AGREEMENT, except as provided for under Article 10.

## 8. Payment to CH2M HILL

Monthly invoices will be issued by CH2M HILL for all work performed under this AGREEMENT. Invoices are due and payable on receipt. Interest at a rate of 1-1/2 percent per month, or that permitted by law if lesser, will be charged on all past-due amounts starting 30 days after date of invoice. Payments will first be credited to interest and then to principal.

In the event of a disputed or contested billing, only that portion so contested will be withheld from payment, and the undisputed portion will be paid. CLIENT will exercise reasonableness in con-

testing any bill or portion thereof. No interest will accrue on any contested portion of the billing until mutually resolved.

## 9. Limitation of Liability

CH2M HILL's liability for CLIENT's damages will, in the aggregate, not exceed \$100,000. This provision takes precedence over any conflicting provision of this AGREEMENT or any document incorporated into or referenced by it.

## 10. Severability and Survival

If any of the provisions contained in this AGREEMENT are held illegal, invalid or unenforceable, the enforceability of the remaining provisions shall not be impaired thereby. Limitations of liability indemnities, and other express representations shall survive termination of this AGREEMENT for any cause.

## 11. Asbestos or Hazardous Substances

To the extent permitted by law, CLIENT will indemnify CH2M HILL from all claims, damages, losses, and costs, including attorney's fees, arising out of or relating to the presence, discharge, release, or escape of hazardous substances, contaminants, or asbestos on, under, or from the PROJECT. CLIENT recognizes that CH2M HILL assumes no risk and/or liability for a waste or hazardous waste site originated by other than CH2M HILL.

## 12. Loan Monitoring Services

When CH2M HILL is providing PROJECT review and/or construction monitoring services to lenders, CLIENT (Lender) will, to the maximum extent permitted by law, indemnify CH2M HILL from all claims, damages, losses, and expenses, including litigation costs and attorney's fees, arising out of or relating to CH2M HILL's involvement or presence on or near the PROJECT.

CH2M HILL is not responsible for the duties and responsibilities that belong to the borrower(s), developer(s), construction contractor(s), designer(s), testing laboratory(ies), full-time inspector(s), or other parties associated with the PROJECT not in the employ of or a subcontractor to CH2M HILL.

## 13. Interpretation

The limitations of liability and indemnities will apply whether CH2M HILL's liability arises under breach of contract or warranty; tort, including negligence; strict liability; statutory liability; or any other cause of action, except the limitations will not apply to willful misconduct or gross negligence for limitations of liability or sole negligence for indemnification. Said limitations shall apply to CH2M HILL's officers, affiliated corporations, employees, and subcontractors.

The law of the State of OREGON shall govern the validity of this AGREEMENT, its interpretation and performance, and any other claims related to it.

## 14. No Third Party Beneficiaries

This AGREEMENT gives no rights or benefits to anyone other than CLIENT and CH2M HILL and has no third party beneficiaries. CH2M HILL services are defined solely by this AGREEMENT, and not by any other contract or agreement that may be associated with the Project.


## 15. Materials and Samples

Any items, substances, materials, or samples removed from the PROJECT site for testing, analysis, or other evaluation will be returned to the PROJECT site within 60 days of PROJECT close-out unless agreed to otherwise. CLIENT recognizes and agrees that CH2M HILL is acting as a bailee and at no time assumes title to said items, substances, materials, or samples.

## 16. Assignments

This is a bilateral personal services AGREEMENT. Neither party shall have the power to or will assign any of the duties or rights or any claim arising out of or related to this AGREEMENT, whether arising in tort, contract or otherwise, without the written consent of the other party. Any unauthorized assignment is void and unenforceable. These conditions and the entire AGREEMENT are binding on the heirs, successors, and assigns of the parties hereto.

## ADDENDUM TO AGREEMENT FOR PROFESSIONAL SERVICES

 This Addendum modifies an Agreement dated July 29, 1994 ("Agreement") between CH2M HILL, Inc. ("Engineer") and the City of Troutdale ("Owner"). The intent of this Addendum is to clarify and modify certain terms and obligations contained in the Agreement between the parties. In the event of any inconsistency between the provision in the Agreement and those in this Addendum, the terms in this Addendum control.

Engineer and Owner agree as follows:

I. Modification of Article 7 (Termination)

Article 7 is amended to eliminate the ability of either party to terminate for convenience and to eliminate the ability of Engineer to obtain payment of termination expenses if the termination by Owner was for cause. Article 7 as amended reads as follows:

This Agreement may be terminated for cause if either party fails substantially to perform through no fault of the other and does not commence correction of such nonperformance within 5 days of written notice and diligently complete the correction thereafter.

On termination, ENGINEER will be paid for all authorized services performed up to the termination date. If the termination is by ENGINEER because of failure of Owner to perform, ENGINEER will receive termination expenses, such as, but not limited to, reassignment of personnel, subcontract termination costs, and related close-out costs.

## **Attachment 1 SCOPE OF WORK**

### **1. Purpose**

CH2M HILL (hereinafter called ENGINEER) will provide a capacity and local limits study for the City of Troutdale Sewage Treatment Plant (STP). The proposed scope of work for the project is comprised of nine major tasks:

1. Project Management
2. Review Existing Conditions at the Plant
3. Project Future Flows and Loads at Buildout
4. Field Test Oxidation Ditch and Secondary Clarifier
5. Develop Design Criteria and Estimate Remaining Capacity
6. Recommend Capital Improvement Projects
7. Develop Local Limits Analysis for Chlorine, FOG, BOD, and TSS
8. Attend Meetings
9. Prepare Technical Report

### **2. Scope of Engineer Services**

The ENGINEER will provide the services defined in each of the tasks described below:

#### ***Task 1 - Manage the Project***

Mr. Correia will manage the day-to-day activities of the project, monitor the progress of the work, track the spending and budget, prepare bi-weekly and monthly reports with focus on status of each task (progress and % completion), prepare monthly billings, and maintain communication with the City, regulators, and consultant staff.

The ENGINEER's assigned task managers will communicate directly with Mr. Correia to inform him of the status of tasks, percent completion, and/or any potential conflicts that could affect the project budget and schedule.

#### ***Task 2 - Review Existing Conditions at the Plant***

##### **2.1 - Review Current Loads and Plant Performance**

The ENGINEER will analyze the existing conditions at the plant by reviewing recent flows and loads and plant performance. The analysis will be based on monitoring data reports (MDRs) for the last seven (7) years of operation. The data will be compiled and summarized for analysis of each process train at the plant.

## 2.2 - Review Plant Hydraulics

The ENGINEER will review current plant hydraulics for identification of any actual or potential "bottlenecks". This analysis will indicate whether or not any of the of the plant processes hydraulic capacity is being limited.

Draft Technical Memorandum (TM) No. 1 will be submitted for review by the City. Comments on the TM No. 1 will be incorporated in the final report.

### ***Task 3 - Project Future Flows and Loads at Buildout***

The ENGINEER will project future flows and loads at City buildout based on historical data derived from the plant's MDRs, zoning regulations, and population projections.

Draft TM No. 2 will be submitted for review by the City. Comments on TM No. 2 will be incorporated in the final report.

### ***Task 4 - Field Test Oxidation Ditch and Secondary Clarifier***

The ENGINEER will complete this task under the subtasks listed below:

#### 4.1 - Secondary Clarifier Dye/Stress Test

This analysis includes two tests to be performed on the secondary clarifier: (1) Crosby dye test, and (2) Stress test. The Crosby test, using a dye, will be accomplished in two steps: (a) the "dispersion" test and the flow pattern test. The ENGINEER will take several samples simultaneously from five different depths in the clarifier using a battery of five sample pumps at five or six stations along the radius of the clarifier. The ENGINEER will collect samples and send to an analytical laboratory for Total Suspended Solids (TSS) analysis.

#### 4.2 - Oxidation Ditch Aeration Efficiency

This analysis includes testing of the oxidation ditch for aeration efficiency by using hydrogen peroxide ( $H_2O_2$ ). In this test, hydrogen peroxide will be added to the oxidation ditch to elevate the dissolved oxygen (DO) level to approximately 25 mg/L. The aerators will then strip this oxygen from the ditch and reestablish an equilibrium DO concentration. DO concentrations will be recorded over time to develop a deoxygenation curve, the inverse of which corresponds to the oxygenation potential of the aerators under actual field conditions.

Draft TM No. 3 will be submitted for review by the City. Comments on TM No. 3 will be incorporated in the final report.

**Task 5 - *Develop Design Criteria and Estimate Remaining Capacity***

The ENGINEER will develop design criteria for existing facilities and estimate their remaining capacities. The design criteria to be used will be based on current design standards and the ENGINEER's experience. Remaining capacities of existing units (and time remaining before capacities are reached) will be estimated by using results from projected flows and loads determined in Task 3 and field testing performed in Task 4.

Draft TM No. 4 will be submitted for review by the City. Comments on TM No. 4 will be incorporated in the final report.

**Task 6 - *Recommend Capital Improvement Projects***

The ENGINEER will make recommendations for short- and long-term improvement projects. These recommendations will be based on results collected from field tests and operating data (MDRs). A rough cost estimate for each of these projects will be developed for planning purposes. An approximate schedule for each of these projects will also be developed.

Draft TM No. 5 will be submitted for review by the City. Comments on TM No. 5 will be incorporated in the final report.

**Task 7 - *Develop Local Limits Analysis for Chlorine, FOG, BOD, and TSS***

The ENGINEER will complete this task under the subtasks listed below:

**7.1 - Data Collection and Review**

- 7.1.1 Obtain historic data on Columbia River Flow through the bi-state Columbia River Program.
- 7.1.2 Obtain industrial monitoring data currently available from City.
- 7.1.3 Review literature and regulations on chlorine and FOG
- 7.1.4 Develop industrial sampling and monitoring needs request and forward to City. Review data as it is submitted from City.
- 7.1.5 Review City's Pretreatment Ordinance, permit and industrial permit.
- 7.1.6 Discuss local limits evaluation process with DEQ by phone.
- 7.1.7 Review Mixing Zone Study
- 7.1.8 Review results of Tasks 2 through 6 for BOD and TSS removal capabilities and limiting capacities
- 7.1.9 Review sludge program