

RESOLUTION NO. 1498

A RESOLUTION APPROVING AND AUTHORIZING THE CITY ENGINEER TO SIGN TASK ORDER NO. 3 TO THE PROFESSIONAL SERVICES AGREEMENT DATED MARCH 3, 1998, BETWEEN THE CITY OF WILSONVILLE AND CH2M HILL, INCORPORATED FOR PHASE I SITE ACCESS, GROUNDWATER EXPLORATION, PUBLIC EDUCATION AND PROJECT PERMITTING OF THE TROUTDALE WELLFIELD DEVELOPMENT PROGRAM.

WHEREAS, Council adopted Resolution No. 1442 on March 2, 1998, authorizing the public works director to sign a professional services agreement with CH2M Hill to evaluate the Troutdale Aquifer as a potential future water supply for the City of Wilsonville including Task Order No. 1 which was the Troutdale Aquifer Study; and

WHEREAS, Task Order No. 2 provided that CH2M Hill would provide limited license assistance to the City of Wilsonville for the Louvonne well; and

WHEREAS, on June 29, 1998, Council adopted Resolution No. 1487 directing the city staff to expedite the planning and development of the Troutdale Aquifer as a future water supply source for the City of Wilsonville; and

WHEREAS, the planning and development of the Troutdale Aquifer will require substantial hydrogeological, engineering and planning assistance to City Staff to expedite the project; and

WHEREAS, by a competitive selection process CH2M Hill was previously selected to provide professional engineering services to the City of Wilsonville for the Troutdale Aquifer study; and

WHEREAS, the City needs to obtain permission to drill at least eight test wells and to develop three pilot wells, and to obtain land use approval, to obtain a Department of Water Resources permit and to refine the cost estimate to develop the Troutdale Aquifer based on the results of the test holes and the pilot wells; and

WHEREAS, it is in the public's interest to expedite the completion of the Troutdale Aquifer analysis and to determine the viability and cost effectiveness of the Troutdale Aquifer as a long-term water supply option; and

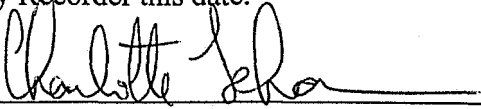
WHEREAS, although this project was not included in the fiscal year 1998/99 Capital Improvements Budget, sufficient funds dedicated to water improvements are available to complete this project.

NOW, THEREFORE, THE CITY OF WILSONVILLE RESOLVES AS FOLLOWS:

1. The City Council directs the City Manager to prepare a supplemental budget amendment to the FY 1998-99 Capital Projects budget to include specific appropriations for the Troutdale Aquifer Planning and Development Project.


2. The City Council serving as a local contract review board does hereby approve and authorize the city engineer to sign a Task Order Number Three to the professional services agreement between the City of Wilsonville and CH2M Hill substantially in the form of Exhibit A attached hereto and incorporated herein to provide the professional services recited above for the referenced project. Authorize the expenditure for this contract in amount not to exceed \$370,000, with costs charged to account 530 49130 5000 339.

ADOPTED by the Wilsonville City Council at a regular meeting thereof this 17th day of August, 1998, and filed with the Wilsonville City Recorder this date.



CHARLOTTE LEHAN, Mayor

ATTEST:



SANDRA C. KING, CMC, City Recorder

SUMMARY of Votes:

Mayor Lehan	Yes
Councilor Kirk	Yes
Councilor Helser	Yes
Councilor Barton	Yes
Councilor Luper	Yes

Task Order No. 3
City of Wilsonville
Troutdale Wellfield Development Program
Phase I: Site Access, Groundwater Exploration, Public
Education and Project Permitting

Included herein is TASK ORDER NO. 3 to the Professional Services Agreement dated March 3, 1998, between the City of Wilsonville (City) and CH2M HILL, INC. Previous Task Orders are as follows:

- Task Order No.1 Troutdale Aquifer Study
- Task Order No.2 Groundwater limited license assistance (Louvonne Well)

TASK ORDER NO. 3 represents the following scope of work, compensation, and time of performance requirements:

Introduction

This scope of work has been developed to investigate the productivity and the groundwater quality of the Troutdale Aquifer. Development of the Troutdale Aquifer Wellfield (Wellfield) has been broken down into three phases of work:

- Phase I Site Access, Groundwater Exploration, Public Education and Project Permitting
- Phase II Production Well Design and Installation
- Phase III Pumping and Treatment System Design and Construction

This Task Order is for Phase I: Site Access, Groundwater Exploration, Public Education and Project Permitting. The timing and development of follow-on Phase II and Phase III work will be decided by the City based on the findings of Phase I. Should the City move forward with the future phases of work, focusing on wellfield implementation and permanent infrastructure, both wellhead protection and continued public involvement will need to be addressed.

Phase I of this work includes right-of-way and access permitting for the proposed wellfield; observation of exploratory drilling and testing at up to ten potential well sites; construction of three temporary pilot wells; construction of four monitoring wells; and a facility siting task to locate three potential locations acceptable for constructing a treatment system and reservoir. In addition, the scope includes tasks for test well drilling bid services, aquifer water level monitoring, land use permitting, and public involvement and education. This Phase of the Troutdale Wellfield Development Program does not include the design and

construction of final production wells, transmission mains, or a storage reservoir and treatment facility. That work will complete under a later scope of work. In addition, this scope of work does not include the contractor costs for drilling, drill rig mobilization, site preparation, pumping of pilot wells, decommissioning of temporary test wells and pilot wells, and site clean up and restoration. Those construction tasks will be put out to public bid.

A brief description of tasks for Phase I of the Wellfield Development Program is described below.

Phase I: Site Access, Groundwater Exploration, Public Education and Project Permitting

Task 1 – Site Location and Access Assistance

CH2M HILL and it's subconsultant Hanna, McEldowney & Associates will assist the City in obtaining Permits of Entry (POE) to perform work of a temporary nature on private property and permits to work within the public right of way. Surveying of potential right-of-way is included. CH2M HILL will also support the City's efforts to obtain up to eight permanent easements with surveying and legal descriptions, and negotiation of acquisition costs with property owners. We assume that the City will prepare the written contracts for easement acquisition. This task includes the following action items :

- Hanna, McEldowney & Associates will obtain permits of entry (POE) for up to ten exploratory drilling sites. These sites may be on private land or public right-of-way. CH2M HILL will provide the exhibit mapping used as attachments to the Right-of Entry Permits. General tax map information will be used to generate the exhibits in 8 1/2" x 11" format.
- Obtain one POE for pump testing of the Louvonne Well owned by the Charbonneau Golf Club.
- Assist the City with negotiation of up to eight easement sites for permanent locations of future production wells.
- Provide preliminary surveys necessary to determine area and extent of the public right-of-way needed for transmission main easements. Assess the effort required to complete easement acquisition. Research existing right-of-way along proposed water transmission alignment. Legal descriptions are not included for the transmission main right of way at this time but will be part of the work completed in Phase II.
- Identify three potential facility sites to locate the pump station/water treatment system and storage reservoir. One site will be selected by the City and the team will evaluate the costs and feasibility of acquiring the selected site.
- Conduct Phase I Environmental Site Assessment (ESA) for the Wellfield Development Project (Phase I Environmental Assessments of the treatment and pump station facility are not included in this task). Liability of all ESAs conducted by CH2M HILL will be limited according to the terms and conditions contained in Appendix A.
- CH2M HILL will supply surveying for legal descriptions of up to ten properties that may be considered for permanent production well construction. Several survey tasks are

associated with the permanent production well sites including: research of county survey records; field survey for boundary and topography; resolve existing boundary and prepare legal descriptions for easements.

- Research will be conducted at the Clackamas County Tax Assessor's and Clackamas County Surveyors office to determine ownership, applicable surveys of record, and identify monuments of record to be located in the field. Affected Owners and Adjoiners deeds will be reviewed for conflicts or senior rights and up to 10 legal descriptions generated for easements on identified well sites parcels. At this time it is assumed that no acquisitions will be needed or partitions of existing sites made for permanent production well locations.
- The identified parcel will need to be surveyed for two purposes to economize field resources. At the time that the boundary of the parcel is surveyed, a topographic survey of the actual well sites will also be conducted. The topographic data collected will be used to produce a digital terrain model and show planimetric data at a scale suitable for construction drawings to be developed in final design. This base drawing will also be used during the permit process for preliminary design review.
- The products of this task include 10 easement descriptions for permanent well locations and a 1"=50' topographic base map for each of the permanent well location sites.

Task 2 – Bid Documents and Driller Selection

This task covers bid document preparation and contractor selection.

- Prepare work plans and schedules for the exploratory drilling and testing.
- Prepare bid and contract documents for drilling ten exploratory borings, conversion of four borings to observation wells and three temporary small-diameter pilot wells.
- Bids shall be evaluated based on water well construction experience, cost, and the ability to meet the required schedule. CH2M HILL will make a recommendation to the City for selecting the contractor. It is assumed that the driller will contract directly to the City.

Task 3 – Monitoring Well Network

The goal of this task is to collect aquifer baseline data before the groundwater exploration drilling and testing begins and throughout Phase I (approximately 6 months). The groundwater level measurement will be begin during the height of the irrigation season (August) and data will be used to assess seasonal groundwater level fluctuation and potential for well interference. Approximately 20 groundwater rights holders in the area will be contacted by letter. Of the 20, we expect to monitor up to 12 existing wells. An additional four (4) monitoring wells will be installed and monitored as part of the Task 4, Drilling and Testing. This task includes the following activities

- Contact approximately 20 water rights holders.
- Negotiate a POE to survey well and monitor groundwater levels at 12 observation wells.
- Survey well locations and elevations of 12 observation wells and of three test well locations and four observation well locations constructed in Task 4, below. This activity includes providing State Plane Coordinates and elevations for up to 19 well sites designated for testing or monitoring. Field survey activities are estimated and budgeted for 3 days to complete this task. It is anticipated that GPS equipment will be utilized to collect the needed data.

- Monitor groundwater levels at 12 observation wells from August 1998 to January 1999 (6 months).

Task 4 – Drilling and Testing Oversight

This task will involve contract oversight of the drilling well construction and testing activities. CH2M HILL's role is presented below:

- Over site of utility clearances for each drill site. A private utility contractor will be hired by CH2M HILL.
- Oversight of drilling and site preparation including construction of drilling pad, safety barriers, traffic control, and site decommissioning and restoration.
- On-site observation and geologic logging of drill cuttings for up to 10 small-diameter test holes to 300 feet. Geologic samples will be collected to estimate yield and to design well screens. Observation of the conversion of four exploratory borings to observation wells.
- On-site observation and geologic logging of drill cuttings and construction oversight for construction of three small-diameter temporary pilot wells.
- Observation and analysis of four step rate pumping tests and four 24-hour constant rate pumping tests to estimate yield (at each pilot well and at the Louvonne well).
- Collection of up to 14 water samples for analysis of all Primary and Secondary Drinking Water constituents as required by the Oregon Health Department.
- Observe decommissioning of exploratory borings, temporary pilot wells, and restoration of each drill site to approximate original conditions.

Task 5 – Revised Project Scope and Cost

The results of property access and groundwater exploration will be reviewed in regards to cost and overall project feasibility. Information on aquifer parameters, groundwater quality and land use issues will be discussed. This task will present a review, and if necessary a revision, of the following items from the original Troutdale Aquifer Study.

- Anticipated total and firm capacity available from the Troutdale Aquifer.
- Transmission main conveyance system and pipe sizing.
- Willamette River crossing of a new transmission main and any required ancillary features.
- Changes in the proposed treatment, storage and pump station facilities, if any.
- Recommended on going water level monitoring in neighboring wells and initial and annual operating costs.
- A revised cost estimate to develop and operate the system.
- Review of timelines to bring the Troutdale production, treatment, storage and transmission system on line.

Task 6 – Troutdale Exploration Reporting and Project Management

This task covers information management and documentation of the exploratory project. Preliminary findings will be conveyed to the City's project manager via weekly conference calls. A draft technical memorandum will be presented to the City for comments before the report is finalized. Twenty-five copies of the final report will be delivered to the City within one week of receiving the City's comments. Task 6 includes the following services:

- Participation in weekly phone conferences.

- Attend four meetings with City staff.
- Summarize findings and recommendations in a draft technical memorandum.
- Produce 25 copies of the final report for the City's use.
- One meeting with City Council to present Phase I findings and recommendations.

Task 7 – Water Rights Permitting (concurrent with other tasks)

The primary goal of this task is to obtain water rights for the Wellfield Development Program. CH2M HILL will prepare a groundwater permit application that includes eight potential well sites. The water rights permitting task will include up to three meetings with Water Resource Department (WRD) staff and attendance of three public meetings. Land use permitting is covered in Task 9. All permit fees for this task will be billed directly to the City of Wilsonville and are not included in this scope of work. This task includes the following services:

- File groundwater permit application for eight potential well sites.
- Review and comment of draft and final orders.
- Attend up to three meetings with WRD staff.
- Attend up to four public meetings regarding water rights.

Task 8 - Public Education Plan

CH2M HILL will develop a public education plan with the City of Wilsonville with the goal of providing accurate and consistent information to the public in a timely manner concerning the City of Wilsonville Wellfield Development Project.

The objectives of the public education plan follow:

- Prepare notification letters to property owners for groundwater level monitoring and for property owners adjacent to potential drilling sites.
- Review previous studies and outreach materials to assess the community's level of understanding and involvement.
- Conduct limited interviews with key stakeholders to identify interests.
- Develop a suggested public education outreach and involvement strategy to address identified issues and concerns.
- Conduct a workshop with City staff to review the scope of the Public Involvement Plan.
- Finalize the Public Involvement Plan with the City's input.

It is anticipated that the plan will guide the City's strategic efforts during the implementation phase. It will be framed to allow stakeholders to reach an informed judgement, minimize misinformation, and will provide means for a clear understanding of the options.

Public Involvement Plan Implementation

CH2M HILL will implement the public involvement plan developed as a result of the efforts defined above. The plan will be specifically designed to address key stakeholder interests and issues. The following scope contains assumptions that may be revised based on the conclusions of the public involvement workshop and strategy efforts:

- Broad community-wide concerns will need to be addressed, including:

- Cost
- Regulatory compliance issues
- Relationship to growth management and the current building moratorium
- Reliability
- Safe, quality water supply for a growing urban area for the future
- Water quality and quantity - comparability with other urban sources of water
- Treatment processes
- Others as identified by stakeholders
- Locally, Impacted Community Concerns will need to be addressed and include:
 - Security
 - Construction Impacts and any anticipated long term disruption
 - Reliable Water Supply for Rural Residential and Agricultural Uses
 - Cost of any necessary well-head protection programs
 - Others as identified by stakeholders

Overlapping issues include safety, reliability and community acceptance. The following program assumes that two separate involvement programs need to be prepared and implemented. It is possible to combine the activities at strategic decision points in the process but, in general, the needs of the two stakeholder groups are assumed to be somewhat discrete.

Workshops

A series of workshops targeting the two interest classifications defined above will be convened throughout the duration of the project. We assume 2 workshops for each broad stakeholder interest classification group, for a total of 4 workshops. Workshops are a very effective communication tool because they get the interested parties together to solve problems and develop suggested solution sets. They replace scores of individual meetings, develop group synergy and minimize the adversary tendencies of the public hearing.

To assure a high quality productive workshop requires advance preparation and facilitation by a public involvement practitioner. Briefing materials, including graphics depicting the boundaries of the aquifer, will need to be written and produced to facilitate understanding and involvement. The first workshop will introduce the stakeholder groups to the process and the follow-up workshop for each group will set the agenda for making recommendations to the City. We have recommended this approach as an expedited process. If more issues arise in either key interest group, more workshop meetings may be added to the scope at the request of the City.

The workshop approach is an effective model for providing briefings to the media because they can be included in the sessions as observers and are less likely to include the comments of only a few stakeholders which often occurs in the hearing setting.

Fact Sheets or Briefing Materials

Facts sheets and briefing materials are a very important set of project documents. These materials will need to present the issues fairly. It is very important that the community interest groups have access to such information to have a meaningful impact on final project outcome. Special effort must be expended in preparing these fact sheets in a concise,

understandable manner. Specialized graphics will need to be produced. The scope assumes the preparation of 4 fact sheets.

Information Phone Line

A project such as this requires access to staff and or consultants to answer questions. This is a technique that can best be handled by local City staff with the assistance of a consultant. We recommend the implementation of a dedicated phone line with an updateable message and staff to answer questions at the option of the caller.

Web Site Design and Implementation

Including all technical information, fact sheets and basic project information on a website is a way to minimize criticism and maximize information flow. The Consultant Team will work with the City to accomplish website information flow. Additional scope detail will be provided at the conclusion of this meeting.

Community understanding, input and involvement is needed for this project to succeed. This scope is based on the understanding that as more is known about the project the nature of the involvement program may need to change accordingly. For example, it may be appropriate to enter into interest-based negotiations with farm interests regarding the implementation of well-head protection and/or access to water rights from the Willamette. We recognize that at the City's direction and understanding, scope items may need to be revised in Phase I or as part of Phase II.

Also, it is important to note that we have not included budget for a task force of stakeholders, for multiple stakeholder workshops, briefings to the City Council, outside regulators (such as the Land Conservation and Development Commission, Environmental Quality Commission and Water Resources Commission and interest groups (such as the Farm Bureau, Oregon Environmental Council, and the like). If the project becomes very politicized, meetings with these and other stakeholder groups are advised, and we can provide scope and budget to carry out these supplemental activities.

Task 9 - Land Use Permitting

Because of the Wellfield Development Program's controversy, the land use process will be an avenue opponents will use to attempt to slow down or stop the project. A thorough evaluation of land use issues and careful completion of land use applications will help minimize the risk that the land use process can cause unwanted delays. This task provides for land use assistance in the evaluation of potential reservoir and treatment plant locations and the development of land use permits for the permanent well sites within the City of Wilsonville and unincorporated Clackamas County. All permit fees for this task will be billed directly to the City of Wilsonville and are not included in this scope of work.

Task 9a. Evaluate Land Use Issues associated with Reservoir/Treatment Plant Locations

This task involves evaluating land use issues and permitting requirements for each of three potential reservoir/treatment plant locations within the City of Wilsonville or Clackamas County. The product of this task would be a technical memorandum outlining regulatory requirements and key issues associated with each site, providing recommendations about the relative ease of permitting each site, and identifying proposed steps for completing the land use permit applications and approvals. Preparing the permit applications for the

reservoir/treatment plant is not part of this task. This work will be done at a later time once a site has been selected.

Task 9b. Development Review for Wilsonville Well Sites

Several of the proposed well sites are located within the City of Wilsonville, either within County road rights-of-way, or on adjacent land. We understand that the Wilsonville planning department believes that it may be feasible to provide land use review for the well sites through an Administrative Review. However, because an Administrative Review is subject to appeal at the Development Review Board, it may be preferable to take the application to the Development Review Board first. We assume for this task that the well sites would be permitted as a group, separately from the reservoir and treatment plant, and would be subject to a public hearing before the Development Review Board. In this task CH2M HILL would provide the following services:

- Participate in a pre-application meeting with City of Wilsonville planning department staff.
- Prepare the findings that support the application's consistency with Comprehensive Plan policies.
- Participate in one public hearing.

We assume that the City of Wilsonville would prepare and issue notices to landowners as required by City code, and we also assume that the Development Review Board decision would not be appealed to City Council.

Task 9c. Conditional Use Permit for Clackamas County Well Sites

At least five of the well sites would be located within unincorporated Clackamas County, on land zoned as rural residential or otherwise non-EFU (Exclusive Farm Use) and would require a Conditional Use Permit reviewed through the County's Land Use Hearings Officer. The water pipeline and potentially one or more of the wells would require a public right-of-way permit. In this task, CH2M HILL would do the following:

- Participate in one pre-application meeting with Clackamas County planning department staff.
- Prepare the findings to support the application's consistency with Development Code and Comprehensive Plan policies.
- Participate in one public hearing.
- Develop County right-of-way use permit for placing well and/or pipeline in County Road.

We assume that Clackamas County will prepare and issue notices to landowners as required by County code, and we also assume that the Hearings Officer's decision will not be appealed to the Land Use Board of Appeal (LUBA).

Task 10 – Wellhead Protection Plan

The objective of this task is to provide the City with the initial framework for a wellhead protection plan. The result of this work will be an estimate of the area affected by the proposed production wells (also referred to as a wellhead protection area delineation) and

an outline of possible strategies the City could implement to protect the quality of groundwater in the area surrounding the wells. It is understood that the City intends to involve the various stakeholders (e.g., farmers, landowners) in the development of final strategies to protect groundwater quality. This scope of work is intended to provide a starting point for these discussions and includes the following elements:

- Delineate the wellhead protection area around each well site for a 10-year time of travel.
- Identify potential contaminant sources based upon the Phase 1 ESA work conducted under Task 1. Prioritize sources based on risk to the aquifer.
- Outline possible management strategies for minimizing the threat of contamination to groundwater using best management practices.
- Present an approach for continuing the development of the wellhead protection plan, including a strategy for coordinating stakeholders, and implementing a realistic and inclusive plan.

Project Team

We propose a project team with experience working specifically on wellfield development, conditional use permitting, and public involvement:

Project Manager: Jeff Barry, R.G., has over 14 years of groundwater experience. He recently managed the City's Troutdale Aquifer Study. Jeff has been project lead wellfield development projects including those for the City of Newburg, Dayton, Lafayette, and the City of Portland. Through this work and many others, Jeff provides expertise in hydrogeology, water rights permitting, and public involvement.

Senior Engineer: Bob Fuller, P.E., will assist Jeff as senior advisor for the project. Bob understands the engineering and infrastructure requirements of the City and can provide insight into how this project integrates with plans under consideration by other agencies. Bob is a senior water engineer with more than 30 years experience as project manager or senior consultant on a variety of projects related to water systems planning and design and construction of water facilities.

Senior Planner: Andy Linehan, AICP, has been a planner with CH2M HILL for 10 years. He specializes in developing land use and environmental permits for public and private facilities, ranging from water pipelines to generation and transmission facilities. He has also assisted local municipalities with revisions to land use plans and ordinances and Periodic Reviews. For this project he will lead the development of land use applications and assist with the public education activities.

Senior Public Involvement and Policy Planner: Linda Macpherson is in CH2M HILL's water group, where she has been the lead facilitator for numerous complex water management projects. Through her work at the Portland Bureau of Environmental Services, the Department of Land Conservation and Development, and (for the last 7 years) at CH2M HILL, Linda has managed the development and implementation of public policy and public involvement programs for controversial water and wastewater projects for many municipal clients in northern Oregon and nationally. She will lead the public education component for the project.

Project Hydrogeologist: Bob Long, R.G., is a hydrogeologist who will assist in all aspects of the project. Bob has 8 years of experience in groundwater development, well design, and aquifer testing. He was a key team member working on the Troutdale Aquifer Study.

Project Engineer: Kan Hwee, P.E., will lead the engineering and cost estimating elements of the project. Kan has more than 10 years experience in water and wastewater system planning, analysis, and design. He is very familiar alternative water treatment technologies and OHD requirements. He was the lead engineer on the Troutdale Aquifer Study.

Senior Certified Appraiser and Real Estate Agent: Roger Hanna is a senior partner of Hanna, McEldowney & Associates, a company specializing in appraisal, relocation, and acquisition studies. Roger has a 28 years of experience in the northwest as an appraiser and negotiator. Roger will assist the project team with POE and easement negotiations.

Compensation

Compensation will be on a time and expense basis in accordance with Exhibit C (CH2M HILL 1998 rate schedule) of the Professional Services Agreement. New labor rates may be renegotiated after December 1998. Table 1 provides a listing of tasks and budget for the tasks described in this proposal. The total estimated budget for the Wellfield Development Program - Phase I: Site Access, Groundwater Exploration, Public Education and Project Permitting is \$362,318.

Time of Performance

We understand that the City wishes to proceed as quickly as possible through the permitting and exploration phase of this project. Figure 1 presents a tentative schedule for completing Phase I of the wellfield development program. The schedule is subject to change and may be modified and the discretion of the City. Some work has begun at the City's discretion, and in an attempt to maintain the proposed field work schedule. The timing of the drilling exploration and pump testing is critical. Should additional delays to the drilling schedule occur, the goals of the project and/or the completion date may require significant revision.

Authorization

The undersigned authorizes the scope of work and budget described in this Task Order.

Authorized by

Date

Project Cost Summary

Task Order 3: Phase 1 Wellfield Development Program					
Table 1. Per Diem Budget By Task					
Task	Description	Labor Hours	Labor	Outside Services and Expenses	Total
1	Site Location and Access	613	40,120	62,244	102,364
2	Bid Documents and Driller Selection	78	6,404	1,319	7,723
3	Monitoring Well Network	364	23,034	9,646	32,680
4	Drilling and Testing Oversight	847	59,135	25,794	84,929
5	Revised Scope and Cost	68	5,920	557	6,477
6	Troutdale Exploration Reporting	342	26,780	3,159	29,939
7	Groundwater Permitting	220	15,710	1,707	17,417
8	Public Education Plan	436	35,142	3,434	38,576
9	Land Use Permitting	294	28,976	1,964	30,940
10	Wellhead Protection Program	128	10,270	1,003	11,273
Subtotal		3,390	251,491	110,827	362,318
TOTALS	Project Total	3,390	251,491	110,827	362,318

Appendix A

Limitations of the Phase I Environmental Site Assessment

The environmental site assessment (ESA) will be performed and the report prepared for the exclusive use of the City of Wilsonville for specific application to the subject properties described in this scope of work. As such it is reasonable for the City of Wilsonville to rely upon the extent, character, and conclusions of the report. The services provided by CH2M HILL will be rendered in a manner consistent with the level of skill and care ordinarily exercised by members of the profession currently practicing under similar conditions.

This agreement gives no rights or benefits to anyone other than the City of Wilsonville 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.

CH2M HILL will rely on information provided by several sources in the preparation of the report, including environmental reports prepared by others. It will be outside the scope of this project to verify the information provided by these sources. Therefore, CH2M HILL does not guarantee the completeness or accuracy of the information provided by these sources or the report conclusions based on the information.

This report is not a legal representation or legal interpretation of environmental laws, rules, regulations, or policies of local, state, or federal governmental agencies.

It is beyond this scope of work to review: (1) materials containing asbestos; (2) the presence of radon; (3) the presence of lead-based paint; (4) lead in drinking water; (5) identification or delineation of jurisdictional wetlands; (6) issues associated with worker health and safety; (7) issues pertaining to compliance with environmental regulations; (8) liabilities associated with the offsite management of solid or hazardous wastes, or, (9) cost estimates for cleanup and identification of parties potentially responsible for the cleanup of hazardous substance releases. The exclusion of the above items is not a representation of the relevance of these non-scope considerations to the subject property.

Any opinions or recommendations presented apply to site conditions existing when services were performed. CH2M HILL cannot report on, or accurately predict events that may change the site conditions after the described services are performed, whether occurring naturally or caused by external forces.

Limitation of Liability

- a. CH2M HILL's services shall be governed by the negligence standard for professional services, measured as of the time those services are performed.
- b. To the maximum extent permitted by law, CH2M HILL's liability for City of Wilsonville damages for any cause or combination of causes will, in the aggregate, not exceed \$100,000.
- c. As used herein, CH2M HILL includes any affiliated corporations, subcontractors, and any of its or their officers or employees.
- d. This Provision takes precedence over any conflicting provision of this agreement or any document incorporated into it or referenced by it.

e. City of Wilsonville waives all claims against CH2M HILL, including those for latent defects, that are not brought within two years of substantial completion of the work or final payment to CH2M HILL, whichever is later.

The limitations of liability 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 interpretations and performance, and any other claims related to it.

**City of Wilsonville
Troutdale Wellfield Development Program
Phase 1: Site Access, Groundwater Exploration, Public Education and Project Permitting**

ID	Task Name	Duration	Start	Finish	August				September				October				November				December				January							
					7/26	8/2	8/9	8/16	8/23	8/30	9/6	9/13	9/20	9/27	10/4	10/11	10/18	10/25	11/1	11/8	11/15	11/22	11/29	12/6	12/13	12/20	12/27	1/3	1/10	1/17	1/24	
1	Task 1 - Site Location & Access Assistance	112d	7/30/98	12/13/98	[Roll Up Progress]																											
2	Obtain POE for up to 10 drilling sites and Louvonne well	24d	7/30/98	8/26/98	[Task]																											
3	Assist City with negotiations of easement sites	90d	8/18/98	12/6/98	[Task]																											
4	Determine future transmission main ROW	13d	11/29/98	12/13/98	[Task]																											
5	Identify 3 potential facility sites	13d	11/29/98	12/13/98	[Task]																											
6	Conduct Phase I ESA	25d	9/1/98	9/30/98	[Task]																											
7	Survey up to 8 properties for legal descriptions	34d	11/2/98	12/13/98	[Task]																											
8	Task 2 - Bid Documents and Driller Selection	38d	7/30/98	9/13/98	[Roll Up Task]																											
9	Prepare work plans & schedules	13d	7/30/98	8/13/98	[Task]																											
10	Prepare bid & contract documents	18d	8/10/98	8/30/98	[Task]																											
11	Recommend contractor	12d	8/30/98	9/13/98	[Task]																											
12	Task 3 - Monitoring Well Network	144d	7/30/98	1/22/99	[Roll Up Task]																											
13	Contact water rights holders	8d	7/30/98	8/8/98	[Task]																											
14	Negotiate POE to survey well & monitor groundwater levels	8d	7/30/98	8/8/98	[Task]																											
15	Confirm well locations by survey	7d	8/23/98	8/30/98	[Task]																											
16	Monitor 12 observations wells	119d	8/28/98	1/22/99	[Milestone]																											
39	Task 4 - Drilling and Testing Oversight	108d	9/14/98	1/24/99	[Roll Up Task]																											
40	Oversight of utility clearances for each drill site	7d	9/20/98	9/27/98	[Task]																											
41	Site preparation	13d	9/14/98	9/28/98	[Task]																											
42	Drilling observation 10 exploratory borings	28d	9/21/98	10/25/98	[Task]																											
43	On-site observation, temporary wells	33d	10/12/98	11/22/98	[Task]																											
44	Observation and analysis - Pump tests step rate/constant rate	23d	11/8/98	12/6/98	[Task]																											
45	Site restoration well decommissions	23d	12/27/98	1/24/99	[Task]																											
46	Task 5 - Revised Project Scope and Cost	0d	12/27/98	12/27/98	[Milestone]																											
47	Task 6 - Troutdale Exploration Reporting	14d	12/31/98	1/19/99	[Roll Up Task]																											
48	Prepare draft Tech Memo	0d	12/31/98	12/31/98	[Milestone]																											
49	Prepare final Tech Memo	0d	1/10/99	1/10/99	[Milestone]																											
50	Meet w/City Council to Present findings & recommendations	0d	1/19/99	1/19/99	[Milestone]																											
51	Task 7 - Groundwater Permitting	73d	8/30/98	11/27/98	[Roll Up Task]																											
52	File groundwater permit application (8 potential wells)	0d	8/30/98	8/30/98	[Milestone]																											
53	Review & comment on draft order (public comment period)	22d	11/1/98	11/27/98	[Task]																											

Project: [] Milestone: [] Rolled Up Task: [] Rolled Up Progress: []
 Date: 8/12/98 Progress: [] Summary: [] Rolled Up Milestone: []

**City of Wilsonville
Troutdale Wellfield Development Program
Phase 1: Site Access, Groundwater Exploration, Public Education and Project Permitting**

ID	Task Name	Duration	Start	Finish	August				September				October				November				December				January							
					7/26	8/2	8/9	8/16	8/23	8/30	9/6	9/13	9/20	9/27	10/4	10/11	10/18	10/25	11/1	11/8	11/15	11/22	11/29	12/6	12/13	12/20	12/27	1/3	1/10	1/17	1/24	
54	Task 8 - Public Education Plan	129d	7/30/98	1/3/99	[Rollup bar]																											
55	Prepare notification letters to property owners	10d	7/30/98	8/10/98	[Task bar]																											
56	Conduct interviews	10d	8/11/98	8/21/98	[Task bar]																											
57	Develop public education outreach strategy	10d	8/23/98	9/2/98	[Task bar]																											
58	Conduct workshop with City staff	1d	9/3/98	9/3/98	[Task bar]																											
59	Finalize Public Involvement Plan	5d	9/4/98	9/10/98	[Task bar]																											
60	Implementation workshops and plan support	94d	9/10/98	1/3/99	[Task bar]																											
61	Task 9 - Land Use Permitting	145d	7/30/98	1/24/99	[Rollup bar]																											
62	Evaluate land use issues associated w/reservoir/treatment locations	10d	12/14/98	12/24/98	[Task bar]																											
63	Task 9a - Development review for Wilsonville well sites	134d	7/30/98	1/9/99	[Rollup bar]																											
64	Participate in pre-app meeting	1d	7/30/98	7/30/98	[Task bar]																											
65	Prepare findings	10d	7/31/98	8/11/98	[Task bar]																											
66	Submit application	0d	8/11/98	8/11/98	[Milestone diamond]																											
67	Permit processing review and appeal	150ed	8/12/98	1/9/99	[Task bar]																											
68	Participate in Public Hearing	1d	10/1/98	10/1/98	[Milestone diamond]																											
69	Task 9b - Conditional Use Permit for Clackamas County well sites	132d	8/14/98	1/24/99	[Rollup bar]																											
70	Participate in pre-app meeting	1d	8/14/98	8/14/98	[Task bar]																											
71	Prepare findings	10d	8/16/98	8/26/98	[Task bar]																											
72	Submit application	0d	8/26/98	8/26/98	[Milestone diamond]																											
73	Permit processing review and appeal	150ed	8/27/98	1/24/99	[Task bar]																											
74	Participate in Public Hearing	1d	10/16/98	10/16/98	[Milestone diamond]																											
75	Task 9c - Develop County ROW use permit	44d	7/30/98	9/20/98	[Task bar]																											
76	Task 10 - Wellhead Protection Program	41d	11/29/98	1/17/99	[Rollup bar]																											
77	Delineate Wellhead Protection area	19d	11/29/98	12/20/98	[Task bar]																											
78	Prioritize potential contaminant sources	13d	12/6/98	12/20/98	[Task bar]																											
79	Outline Best Management Practices	18d	12/13/98	1/3/99	[Task bar]																											
80	Approach for future development plan	17d	12/27/98	1/17/99	[Task bar]																											

Project: ██████████ Task ██████████ Milestone ◆ Rolled Up Task ██████████ Rolled Up Progress ██████████
 Date: 8/12/98 Progress ██████████ Summary ▶ Rolled Up Milestone ◆

**City of Wilsonville
Troutdale Wellfield Development Program
Phase 1: Site Access, Groundwater Exploration, Public Education and Project Permitting**

ID	Task Name	Duration	Start	Finish	August					September					October				November				December				January					
					7/26	8/2	8/9	8/16	8/23	8/30	9/6	9/13	9/20	9/27	10/4	10/11	10/18	10/25	11/1	11/8	11/15	11/22	11/29	12/6	12/13	12/20	12/27	1/3	1/10	1/17	1/24	
1	Task 1 - Site Location & Access Assistance	112d	7/30/98	12/13/98	[Progress bar]																											
2	Obtain POE for up to 10 drilling sites and Louvonne well	24d	7/30/98	8/26/98	[Progress bar]																											
3	Assist City with negotiations of easement sites	90d	8/18/98	12/6/98	[Progress bar]																											
4	Determine future transmission main ROW	13d	11/29/98	12/13/98	[Progress bar]																											
5	Identify 3 potential facility sites	13d	11/29/98	12/13/98	[Progress bar]																											
6	Conduct Phase I ESA	25d	9/1/98	9/30/98	[Progress bar]																											
7	Survey up to 8 properties for legal descriptions	34d	11/2/98	12/13/98	[Progress bar]																											
8	Task 2 - Bid Documents and Driller Selection	38d	7/30/98	9/13/98	[Progress bar]																											
9	Prepare work plans & schedules	13d	7/30/98	8/13/98	[Progress bar]																											
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12	Task 3 - Monitoring Well Network	144d	7/30/98	1/22/99	[Progress bar]																											
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46	Task 5 - Revised Project Scope and Cost	0d	12/27/98	12/27/98	[Milestone diamond]																											
47	Task 6 - Troutdale Exploration Reporting	14d	12/31/98	1/10/99	[Progress bar]																											
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51	Task 7 - Groundwater Permitting	73d	8/30/98	11/27/98	[Progress bar]																											
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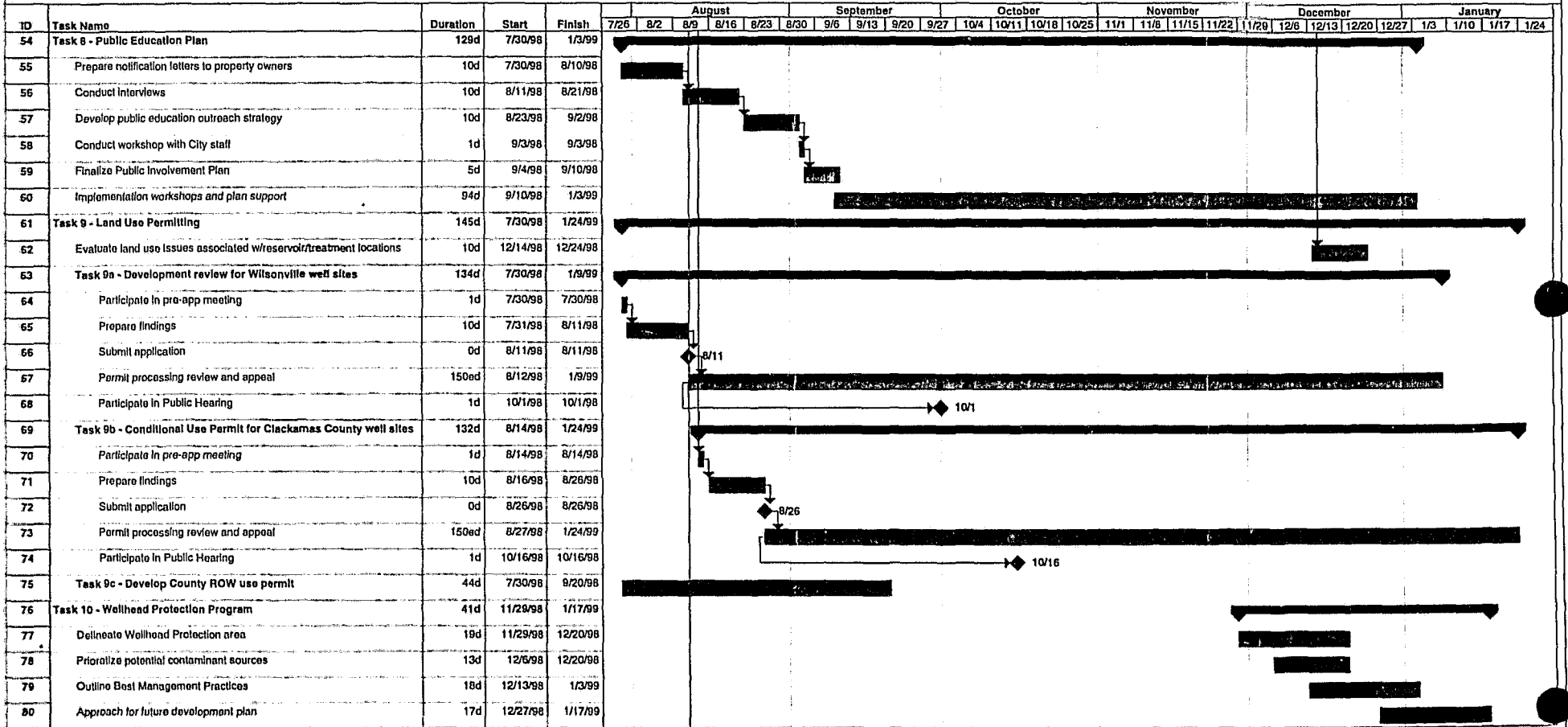
Project Date: 8/12/99

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Progress [Progress bar] Summary [Arrow] Rolled Up Milestone [Diamond]

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City of Wilsonville
Troutdale Wellfield Development Program
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Project
Date 0/12/98

Task [Bar] Milestone [Diamond] Rolled Up Task [Bar] Rolled Up Progress [Bar]
 Progress [Bar] Summary [Bar] Rolled Up Milestone [Diamond]