

**CITY OF NEWBERG**  
**PROFESSIONAL SERVICES AGREEMENT AMENDMENT NO. 8**  
**July 26, 2001**

**Project:** Fire Station, Public Works Yard and River Street Sewer Groundwater Investigations  
**Consultant:** Kleinfelder, Inc.

---

**Summary of Proposed Changes:**

1. Work Involved:

Expand scope of Public Works Yard soil sampling and laboratory analysis to include a response letter to DEQ and another round of groundwater monitoring, as directed by DEQ and documented in Attachment "A," a July 25 memorandum to the City from Kleinfelder, Inc., "Estimated Costs to address DEQ Issues, City of Newberg Public Works Facility, 500 West 3<sup>rd</sup> Street, Newberg, Oregon, Kleinfelder Project No. 60-5289-01."

2. Cost Summary:

Original contract amount:	\$29,275
Net change by previous amendments:	<u>21,135</u>
Previous total:	\$50,410
This amendment:	<u>5,000</u>
Amended contract amount:	<b>\$55,410</b>

3. Contract Time:

Contract time is extended to September 30, 2001.

All other provisions of the professional services agreement remain in force.

---

**ACCEPTANCE SIGNATURES:**

**Kleinfelder, Inc.:**

Peter L. Stroud 8-3-01  
Signature Date

Peter L. Stroud 8-3-01  
Name Title

Environmental Group Leader

**City of Newberg:**

Duane R. Cole 8/13/2001  
Duane R. Cole, Date  
City Manager

**Approved as to form:**

Terrence D. Mahr  
Terrence D. Mahr, Date  
City Attorney

**MEMORANDUM**

DATE: July 25, 2001

TO: Mr. Mike Soderquist, Director of Community Development  
City of Newberg

FROM: David Lamadrid, Project Geologist

SUBJECT: **Estimated Costs to Address DEQ Issues, City of Newberg Public Works Facility,  
500 West 3<sup>rd</sup> Street, Newberg, Oregon, Kleinfelder Project No. 60-5289-01**

---

This memorandum presents our cost estimate to address data gaps identified by the Oregon Department of Environmental Quality (DEQ) in a letter dated July 11, 2001. The DEQ letter presented an evaluation by Ms. Virginia Esmond, DEQ project management for the above-referenced site, regarding Kleinfelder's Risk-Based Evaluation (RBE) report, dated March 13, 2001. The DEQ letter identified issues or data gaps that will need to be addressed prior to further consideration of No Further Action status for the subject property. These issues are briefly summarized below:

1. DEQ requested documentation to support the assertion that the property will remain industrial into the foreseeable future.
2. DEQ indicated it was unclear from the report why analytical testing units were inconsistent (ppm vs ppb), and if these soils have been excavated or remain in place.
3. DEQ requested additional information regarding analytical data for soil collected below a depth of 10 feet below the ground surface, and also requested clarification of why the analytical data were excluded from evaluation in the RBE.
4. DEQ also requested that additional groundwater sampling be performed to evaluate the potential presence of the full suite of Risk-Based Decision Making (RBDM) volatile organic compounds (VOCs) and polynuclear aromatic hydrocarbons (PAHs). A work plan for the additional sampling was requested.

It is our understanding that the City of Newberg will submit the necessary land use documentation to DEQ directly to address item No. 1 above. This cost estimate describes a scope of work and estimated costs to address item Nos. 2, 3, and 4 above. Two tasks are anticipated: Task 1 will include preparation of a response letter to DEQ, and Task 2 will include groundwater sampling and reporting. The tasks are described below.

***Task 1 – Response Letter***

A response letter will be prepared and submitted to DEQ to address item Nos. 2 and 3 above. Resolution of the analytical testing units is anticipated to be straightforward. A detailed explanation of why analytical data for deeper soil samples was excluded will also be provided, as well as further explanation of the potentially complete exposure pathways at the site and applicable Risk-Based

Concentration (RBC) cleanup levels. It is our opinion that our response will provide sufficient rationale to resolve this issue, and that additional soil sampling or corrective action will not be necessary. A draft copy of the response letter will be provided to you for review and comment before submittal to DEQ.

The response letter will also include a brief work plan for additional groundwater sampling. The work plan will describe the field methods and analytical testing program for one groundwater monitoring event.

Telephone consultation and a meeting with DEQ to discuss these issues may be necessary before completing Task 1.

The estimated costs for the response letter and work plan are approximately \$1,200 to \$1,500.

***Task 2 – Groundwater Monitoring***

One groundwater monitoring event will be performed. A groundwater sample from each of the three site monitoring wells will be collected and analyzed for RBDM VOCs by EPA Method 8260B and RBDM PAHs by EPA Method 8270-SIM in accordance with the work plan described in Task 1. After the final analytical data are available, a groundwater monitoring report will be prepared describing the analytical results. The report will serve as an addendum to the RBE report and will further evaluate Constituents of Concern (COCs), if any, for the site based on the analytical data. A draft copy of the report will be provided to you for review and comment before submittal to DEQ.

The estimated costs for one groundwater monitoring event and report preparation are as follows:

Groundwater Sampling	\$1,200
Laboratory Analysis (standard turnaround)	\$ 500
Project Management and Reporting	<u>\$1,800</u>
TOTAL	\$3,500

***Total Estimated Fee and Schedule***

The professional fees for conducting the described scope of work are on a time-and-materials basis and are estimated to be approximately \$4,700 to \$5,000. Our work will be conducted in accordance with the terms and conditions outlined in our Agreement with the City of Newberg, dated May 19, 1998.

Our work can begin immediately upon authorization to proceed. Task 1 can be completed within one to two weeks after consultation with DEQ. The fieldwork will be conducted upon review and approval of the work plan by DEQ. A final report of the groundwater sampling and risk-based evaluation can be prepared within two to three weeks of receiving the final analytical results.

**CITY OF NEWBERG**  
**PROFESSIONAL SERVICES AGREEMENT AMENDMENT NO. 7**  
**April 3, 2001**

**Project:** Fire Station, Public Works Yard and River Street Sewer Groundwater Investigations  
**Consultant:** Kleinfelder, Inc.

---

**Summary of Proposed Changes:**

1. Work Involved:

Expand scope of River Street Sewer soil sampling and laboratory analysis to include the Parrett Mountain soils evaluation, as directed by DEQ and documented in Attachment "A," a March 30 letter to the City from Kleinfelder, Inc., Phase 003, Parrett Mountain Evaluation.

2. Cost Summary:

Original contract amount:	\$29,275
Net change by previous amendments:	<u>11,135</u>
Previous total:	\$40,410
This amendment:	<u>10,000</u>
Amended contract amount:	<b>\$50,410</b>

3. Contract Time:

Contract time is not changed.

All other provisions of the professional services agreement remain in force.

---

**ACCEPTANCE SIGNATURES:**

**Kleinfelder, Inc.:**

Peter L. Stoud 4-3-01  
Consultant Date

Peter L. Stoud  
Name Title

Environmental Group Leader

**City of Newberg:**

Duane R. Cole 4/13/2001  
Duane R. Cole, Date  
City Manager

**Approved as to form:**

Terrence D. Mahr  
Terrence D. Mahr, Date  
City Attorney

**CITY OF NEWBERG  
PROFESSIONAL SERVICES AGREEMENT AMENDMENT NO. 6  
April 3, 2001**

**Project:** Fire Station, Public Works Yard and River Street Sewer Groundwater Investigations  
**Consultant:** Kleinfelder, Inc.

---

**Summary of Proposed Changes:**

1. Work Involved:

Expand scope of River Street Sewer (Center Street pile) soil sampling and laboratory analysis to include a sampling and analysis plan, as directed by DEQ.

2. Cost Summary:

Original contract amount:	\$29,275
Net change by previous amendments:	<u>10,581</u>
Previous total:	\$39,856
This amendment:	<u>554</u>
Amended contract amount:	<b>\$40,410</b>

3. Contract Time:

Contract time is extended through March 30, 2001.

All other provisions of the professional services agreement remain in force.

---

**ACCEPTANCE SIGNATURES:**

**Kleinfelder, Inc.:**

Peter L. Stroud      4-3-01  
Consultant              Date

Peter L. Stroud  
Name                  Title  
Environmental Group Leader

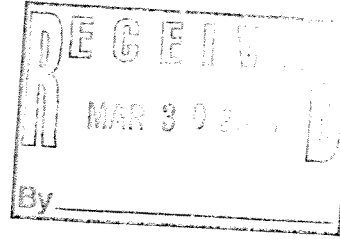
**City of Newberg:**

Duane R. Cole      4/13/2001  
Duane R. Cole,      Date  
City Manager

**Approved as to form:**

Terrence D. Mahr  
Terrence D. Mahr,      Date  
City Attorney

# -ATTACHMENT "A"-



March 30, 2001  
Kleinfelder File No.: 60-5433-01

Mr. Mike Soderquist  
City of Newberg  
Community Development Department  
414 East First Street  
Newberg, Oregon 97132

Subject: **Final Invoice with Discussion of Overages  
Soil Sampling, Laboratory Analysis, DEQ Communications  
River Street Sewer Project  
Newberg, Oregon**

Dear Mr. Soderquist:

Attached is our final invoice for services provided to the City for soil characterization of three different soil stockpiles. The soil stockpiles were constructed when suspect soil was encountered during the installation of new sewer lines by the River Street Sewer Project. The invoice is broken into three different phases for your convenience. Total charges for all services completed to date are \$16,342.25. Total costs for each of the phases are discussed below.

Phase 001 Vermillion. This portion of the invoice is associated tasks performed to oversee sampling of soil stockpiled at the former Unocal property. Amendment No. 4 to our Personal Services Contract (January 19, 2001) approved \$2,512 and total costs were for this phase were \$2,172. This phase is \$340 under the approved budget.

Phase 002 Illinois. This portion of the invoice indicates the total cost for work performed during the characterization of the Center Street Stockpile. Amendment Nos. 3 and 5 to our Personal Services Contract (January 19 and February 12, 2001) approved \$3,719. Total costs being invoiced for this phase are \$4,461. This is an overage of \$894. The overage is the result of DEQ's request that Kleinfelder prepare a Sampling and Analysis Plan for their review and comment prior to performing sampling of the Center Street Stockpile. In our original cost estimate we did not anticipate DEQ making this request and as such unexpected costs incurred. Given the fast track schedule we trying to maintain these costs were never covered by an increase in the authorized budget.

Phase 003 Parret Mountain Evaluation. This portion of the invoice indicates the total cost for work performed during the characterization of the soil used as backfill on the Estby Property. As we discussed by e-mail on March 20, 2001, there does not appear to be a written amendment for this phase of work. You indicated that you would set the estimated costs at \$10,000. Final costs for this phase of work total \$9,519.25.

We appreciate the opportunity to provide environmental consulting services to the City of Newberg for this project. We will call you to see if you have any questions regarding the costs presented in this invoice.

Sincerely,

**KLEINFELDER, INC.**

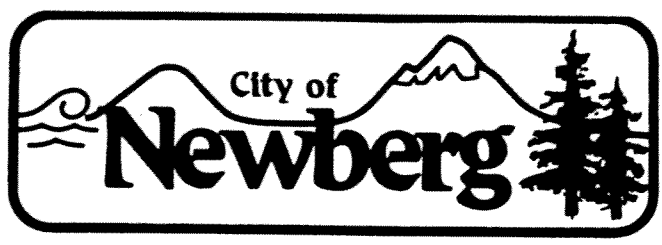


Bart Bretherton, R.G.  
Project Manager

Attachments: Final Invoice for Soil Sampling and Analysis Services

*Becky (vart)*

CITY OF NEWBERG  
CITY RECORDER INDEX NO. *1605*



## Community Development Office

P.O. Box 970 • 414 E. First Street • Newberg, Oregon 97132 • 503-537-1240 • Fax: (503) 537-5013

April 17, 2001

Mr. Peter L. Stroud, C.E.G.,  
Environmental Group Leader  
Kleinfelder, Inc.  
15050 SW Koll Parkway, Ste "L"  
Beaverton, OR 97006-6028

Dear Mr. Stroud:

RE: Amendments Nos. 6 and 7 to Professional Services Agreement between the City of Newberg and Kleinfelder, Inc./Fire Station and Public Works Yard Groundwater Investigations-River Street Sewer Project

The subject amendments to our contract with you have been executed by the City. Enclosed are copies for your files. Thank you.

Sincerely,  
COMMUNITY DEVELOPMENT DEPARTMENT

Mike Soderquist, P.E., P.L.S., DEE  
Director

c: Paul Chiu, P.E., Project Manager  
Dan Danicic, P.E., City Engineer  
Duane Cole, City Manager

K:\WP\ADMIN\MIKESOD\CONSULTA\KleinfPWAdd#7B.wpd

*Vouff*

**CITY OF NEWBERG  
PROFESSIONAL SERVICES AGREEMENT AMENDMENT NO. 5  
February 12, 2001**

**Project:** Fire Station, Public Works Yard and River Street Sewer Groundwater Investigations  
**Consultant:** Kleinfelder, Inc.

**Summary of Proposed Changes:**

1. Work Involved:  
  
Expand scope of River Street Sewer (Center Street pile) soil sampling and laboratory analysis to include two more tests, as directed by DEQ.

2. Cost Summary:

Original contract amount:	\$29,275
Net change by previous amendments:	<u>10,081</u>
Previous total:	\$39,356
This amendment:	<u>500</u>
Amended contract amount:	<b>\$39,856</b>

3. Contract Time:  
  
Contract time is extended through February 28, 2001.

All other provisions of the professional services agreement remain in force.

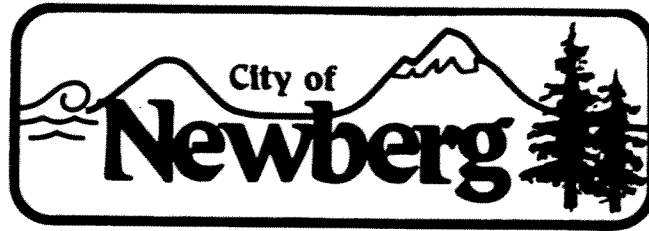
**ACCEPTANCE SIGNATURES:**

**Kleinfelder, Inc.:**  
Peter L. Stroud 2-12-01  
Consultant Date

Peter L. Stroud  
Name Title  
Environmental Group Leader

**City of Newberg:**  
Duane R. Cole 2/27/2001  
Duane R. Cole, Date  
City Manager

**Approved as to form:**  
Terrence D. Mahr 2/27/01  
Terrence D. Mahr, Date  
City Attorney



## Community Development Office

P.O. Box 970 • 414 E. First Street • Newberg, Oregon 97132 • 503-537-1240 • Fax: (503) 537-5013

February 26, 2001

Mr. Peter L. Stroud, C.E.G.,  
Environmental Group Leader  
Kleinfelder, Inc.  
15050 SW Koll Parkway, Ste "L"  
Beaverton, OR 97006-6028

Dear Mr. Stroud:

RE: Amendment No. 5 to Professional Services Agreement between the City of Newberg and Kleinfelder, Inc./Fire Station and Public Works Yard Groundwater Investigations-River Street Sewer Project

The subject amendment to our contract with you has been executed by the City. Enclosed is an original for your files. Thank you.

Sincerely,  
COMMUNITY DEVELOPMENT DEPARTMENT

A handwritten signature in black ink, appearing to read "Mike Soderquist", is written over the typed name.

Mike Soderquist, P.E., P.L.S., DEE  
Director

c: Paul Chiu, P.E., Project Manager  
Duane Cole, City Manager

K:\WPADMIN\MIKESOD\CONSULTA\KleinfPWAdd#5a.wpd

**CITY OF NEWBERG  
PROFESSIONAL SERVICES AGREEMENT AMENDMENT NO. 4  
January 19, 2001**

**Project:** Fire Station and Public Works Yard Groundwater Investigations  
**Consultant:** Kleinfelder, Inc.

---

**Summary of Proposed Changes:**

1. Work Involved:

Expand scope to include soil sampling and laboratory analysis, as described in a January 16, 2001 letter to the City from Kleinfelder (Attachment A).

2. Cost Summary:

Original contract amount:	\$29,275
Net change by previous amendments:	<u>7,569</u>
Previous total:	\$36,844
This amendment:	<u>2,512</u>
Amended contract amount:	<b>\$39,356</b>

3. Contract Time:

Contract time is extended through February 28, 2001.

All other provisions of the professional services agreement remain in force.

---

**ACCEPTANCE SIGNATURES:**

**Kleinfelder, Inc.:**

Peter L. Stroud 1-23-01  
Consultant Date

Peter L. Stroud  
Name Title

Environmental Group Leader

**City of Newberg:**

Duane R. Cole 01-25-2001  
Duane R. Cole, Date  
City Manager

**Approved as to form:**

Terrence D. Mahr 2/27/01  
Terrence D. Mahr, Date  
City Attorney

January 16, 2001  
Proposal No.: 60-YP5468

Mr. Paul Chiu  
City of Newberg  
Community Development Department  
414 East First Street  
Newberg, Oregon 97132

**Subject: Amended Proposal for Soil Sampling and Laboratory Analysis  
River Street Sewer Project  
Intersection of College Street and Vermillion Street  
Newberg, Oregon**

Dear Mr. Chiu:

Kleinfelder, Inc., (Kleinfelder) is pleased to present this proposal for environmental services during construction-related activities associated with the River Street Sewer Project in Newberg, Oregon. This proposal amends the proposal dated December 20, 2000 for the same project. At your request our proposed scope of services was reduced per our phone conversation of January 12, 2001. As stated in our December 20, 2000 proposal this proposal is being presented after Kleinfelder personnel provided oversight activities during the sampling of a soil stockpile located at the intersection of College Street and Vermillion Street in Newberg, Oregon. This proposal includes our revised estimate of the outside direct costs associated with the revised scope of services, as discussed with you.

Kleinfelder is committed to providing quality service to our clients, commensurate with their wants, needs, and desired level of risk. If a portion of this proposal does not meet your needs, or if those needs have changed, Kleinfelder will be happy to consider appropriate modifications, subject to the standards of care to which we adhere to as professionals.

The following sections contain a description of the project; anticipated subsurface conditions; and our proposed scope of services, schedule, and fee estimate.

## **PROJECT DESCRIPTION**

The site is a vacant lot located at the northwest corner of the intersection of College Street and Vermillion Street. The site is also located adjacent to the Southern Pacific Railroad tracks.

L:\2001\PROPOSALS\60YP5468\6021P012.DOC  
COPYRIGHT 2001 KLEINFELDER, INC.

Environmental services are required as a result of the removal of possibly contaminated soil and groundwater during the installation of a new sewer line in the vicinity of a former Unocal bulk facility. The site is informally referred to as the Bore Pit Soil Stockpile.

## **SCOPE OF SERVICES**

When preparing this proposal, we reviewed the following documents:

- Two analytical data reports prepared by North Creek Analytical, Inc.,
- Drawings prepared by the City of Newberg indicating sample collection locations,
- Correspondence and memoranda between the City and Department of Environmental Quality (DEQ), and
- A letter to Unocal from the City notifying Unocal of the City's expectations for cost recovery and Unocal's responsibility for soil disposal costs.

Based on our current knowledge of impacts in the vicinity of the "Bore Pit", we have assumed that no more than four soil samples will be analyzed for total petroleum hydrocarbon contaminant identification and follow-up quantification as indicated by the TPH-HCID analysis. We further assume that at least one (1) sample, representing the worst case scenario for contamination, will be analyzed for benzene, ethylbenzene, toluene, total xylenes (BTEX) by EPA Method 8021; polynuclear aromatic hydrocarbons (PAH) by EPA Method 8270 SIM; and a full semivolatile organic compound screen (SVOC) by EPA Method 8270.

Our scope of services includes the following activities:

- Conduct a site visit to observe Geoengineers, Inc., (Consultant for Unocal) collect soil samples from the excavated soil stockpiled adjacent to the Bore Pit and collect split samples (completed).
- Submit selected split samples for analytical analysis by Specialty Analytical Laboratories of Tualatin, Oregon (completed).
- Communicate with the DEQ to expedite their review of the site work and analytical data obtained from the contract laboratory.

## **SCHEDULE**

We understand that all construction is scheduled for completion by January 15, 2001. As such, evaluations must be performed in a timely fashion so as not to result in construction delays which will result in budget overruns for the City of Newberg. Currently, our site visit has been performed and four (4) soil samples were submitted to the analytical laboratory. A standard laboratory turn-around time of 5 to 7 business days was requested to minimize project costs for laboratory analysis of soil samples. Analytical data was available in early January.

## **FEE BASIS**

We propose that the scope of services described herein be provided on a time and materials basis in accordance with our existing agreement between the City of Newberg, and Kleinfelder. We are prepared to perform the scope of work described above for \$2,512. Cost estimates for the tasks described above are detailed in the attached Project Cost Estimate. Kleinfelder will not exceed this total estimated cost without your prior approval.

## **CLOSURE**


You may authorize our services by issuing a Task Order or contract amendment.

We appreciate the opportunity to present this confirming proposal and look forward to providing services to the City of Newberg for this project. If you have any questions regarding the contents of this proposal or require additional information, please call us at (503) 644-9447.

Sincerely,

**KLEINFELDER, INC.**

  
Bart Bretherton, R.G.  
Project Manager

  
Peter L. Stroud, C.E.G.  
Environmental Group Leader

Attachments: Table 1 Project Cost Estimate

## PROJECT COST ESTIMATE

Sampling Oversight With Analytical Laboratory  
 Intersection of College and Vermillion  
 River Street Sewer Project  
 Newberg, Oregon

Ref: 60YP5468  
 Created: 19-Dec-00  
 By: BGB  
 Revised: BGB:01/15/01

NOTE: Refer to Kleinfelder amended proposal dated January 15, 2001 for specific scope of work.

WORK TASK DESCRIPTION	PERSONNEL AND HOURLY RATES (P05 Rate Table)						TOTAL HOURS	TOTAL LABOR AMOUNT
	Principal	P. Geologist	S. Engineer	Engineer	Tech./Draft.	Clerical		
	\$95	\$75	\$80	\$67	\$45	\$42		
Sample Collection Oversight	1	8	0	0	0	0	9	\$695
Communications with DEQ	1.5	3	0	0	0	0	4.5	\$368
Contaminant Analyses	0	0	0	0	0	0	0	\$0
Report Preparation	0	0	0	0	0	0	0	\$0
<b>TOTAL LABOR</b>	<b>2.5</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13.5</b>	<b>\$1,063</b>

### DIRECT EXPENSES

Mileage @ \$0.4/mi.	\$0
Per Diem	\$0
Laboratory Testing	\$0
Report Production	\$0
<b>Total:</b>	<b>\$0</b>

### SUBCONTRACTOR COSTS

Analytical Laboratory (assuming Specialty Analytical)	\$1,449
Drilling	\$0
<b>Total:</b>	<b>\$1,449</b>

### PROJECT TOTALS AND SUMMARY

Total Labor Cost	\$1,063
Direct Expenses	\$0
Subcontractor Costs	\$1,449
<b>PROJECT TOTAL</b>	<b><u><u>\$2,512</u></u></b>

**CITY OF NEWBERG**  
**PROFESSIONAL SERVICES AGREEMENT AMENDMENT NO. 3**  
**January 19, 2001**

**Project:** Fire Station and Public Works Yard Groundwater Investigations  
**Consultant:** Kleinfelder, Inc.

---

**Summary of Proposed Changes:**

1. Work Involved:

Expand scope to include soil sampling and laboratory analysis, as described in a January 16, 2001 letter to the City from Kleinfelder (Attachment A).

2. Cost Summary:

Original contract amount:	\$29,275
Net change by previous amendments:	<u>4,350</u>
Previous total:	\$30,225
This amendment:	<u>3,219</u>
Amended contract amount:	<b>\$36,844</b>

3. Contract Time:

Contract time is extended through February 28, 2001.

All other provisions of the professional services agreement remain in force.

---

**ACCEPTANCE SIGNATURES:**

**Kleinfelder, Inc.:**

Peter L. Stroud 1-23-01  
Consultant Date

Peter L. Stroud  
Name Title  
Environmental Group Leader

**City of Newberg:**

Duane R. Cole 01-25-2001  
Duane R. Cole, Date  
City Manager

**Approved as to form:**

[Signature] 2/27/01  
Terrence D. Mahr, Date  
City Attorney

January 16, 2001  
Proposal No.: 60-YP5569

Mr. Paul Chiu  
City of Newberg  
Community Development Department  
414 East First Street  
Newberg, Oregon 97132

**Subject:      Proposal for Soil Sampling and Laboratory Analysis  
                 River Street Sewer Project  
                 Intersection of College Street and Illinois Street  
                 Newberg, Oregon**

Dear Mr. Chiu:

Kleinfelder, Inc., (Kleinfelder) is pleased to present this proposal for environmental services during construction-related activities associated with the River Street Sewer Project in Newberg, Oregon. This proposal is being presented after Kleinfelder personnel performed preliminary field work at the request of the City of Newberg. This proposal includes our estimate of the outside direct costs associated with a scope of services for characterizing approximately 300 to 500 cubic yards of soil stockpiled for disposal at a Class D landfill.

Kleinfelder is committed to providing quality service to our clients, commensurate with their wants, needs, and desired level of risk. If a portion of this proposal does not meet your needs, or if those needs have changed, Kleinfelder will be happy to consider appropriate modifications, subject to the standards of care to which we adhere to as professionals.

The following sections contain a description of the project; anticipated subsurface conditions; and our proposed scope of services, schedule, and fee estimate.

## **PROJECT DESCRIPTION**

It is our understanding that the soil to be sampled was excavated from a new sewer line alignment along Deskins Street, just south of the intersection of College Street and Illinois Street. The site is also located approximately 70 feet north of the Southern Pacific Railroad tracks. Environmental services are required as a result of the removal of possibly contaminated soil which now must be characterized for disposal in a permitted landfill. At this time, Kleinfelder

L:\2001\PROPOSALS\60YP5468\6021P011.DOC  
COPYRIGHT 2001 KLEINFELDER, INC.

personnel have already made one site visit on December 14, 2000, during the excavation of the trench for the sewer line. At that time two soil samples were collected and submitted to Specialty Analytical Laboratory for Total Petroleum Hydrocarbon Identification (TPH-HCID) using the appropriate Northwest methods.

We understand that the City believes that possible contamination observed at this location may be related to activities at the former Unocal bulk facility located just south of the Southern Pacific Railroad tracks at the intersection of College and Vermillion Streets. Samples collected from stockpiled soil from the sewer line bore pit contained concentrations of volatile organic compounds which require the soil to be disposed of at a landfill permitted for acceptance of special wastes. Our conversations with you have indicated that the City of Newberg is conducting on-going discussions with the Department of Environmental Quality to determine the appropriate sampling plan for these soils.

## **SCOPE OF SERVICES**

When preparing this proposal, we reviewed the following documents:

- Field notes of Kleinfelder personnel present when the soil was excavated as well as analytical data from the two soil samples submitted to Specialty Analytical to screen the soil for possible TPH concentrations,
- Correspondence and memoranda between the City and Department of Environmental Quality (DEQ), and
- Analytical data obtained from soil samples collected at the Vermillion Street "Bore Pit" soil stockpile.

We are basing our proposed scope of services on our current knowledge of the properties adjacent to the sewer line alignment, the soil conditions observed at the time soil was excavated from the sewer line trench, and your conversations with DEQ. We have assumed that stockpiled soil will be sampled using a 13 by 13 foot grid established over the area containing the stockpiled soil.

To estimate our cost, we have assumed that seven soil samples will be analyzed for total petroleum hydrocarbon concentrations in the gasoline and diesel ranges using Northwest methods (NWTPH-Gx and Dx). We further assume that at least one (1) sample, representing the worst case scenario for contamination, will be analyzed for volatile organic compounds (VOC)

by EPA Method 8260B and semivolatile organic compounds (SVOC) by EPA Method 8270C. Our conversations with the landfill indicate that given our current level of understanding of the levels of VOC or SVOC constituents we expect to detect in the stockpiled soil, no additional sampling beyond what is presented in this proposal will be required for the disposal permit.

Our scope of services includes the following activities:

- Observe the trench where soil was excavated, take soil samples to identify possible petroleum hydrocarbon contamination, and present this data to DEQ's project manager (completed).
- Conduct a site visit to collect soil samples from the excavated soil stockpiled on Center Street.
- Submit selected samples from the stockpiled soil for analytical analysis by Specialty Analytical of Tualatin, Oregon.
- Communicate with the DEQ to expedite their review of the site work and analytical data obtained from the contract laboratory.
- Assist the City as necessary with the preparation and submittal of information to the landfill of choice for disposal of the stockpiled soil.

## **SCHEDULE**

We understand that all construction is scheduled for completion by January 15, 2001 and that the stockpiled soil currently restricts traffic flow on Center Street. As such, evaluations must be performed in a timely fashion so as not to result in further inconvenience to the public and unnecessary costs to the City of Newberg. Our remaining site visit can be performed at the earliest convenience to the City. Soil samples will be submitted to the analytical laboratory using a standard laboratory turn-around time of 5 to 7 business days, to minimize project costs for laboratory analysis. Assuming that sampling will occur no later than January 19, 2001, we believe that all analytical data should be available on or about January 31, 2001.

## **FEE BASIS**

We propose that the scope of services described herein be provided on a time and materials basis in accordance with our existing agreement between the City of Newberg and Kleinfelder. We are prepared to perform the scope of work described above for \$3,219. Cost estimates for the

tasks described above are detailed in the attached Project Cost Estimate and include hours and direct costs already incurred by Kleinfelder. Kleinfelder will not exceed this total estimated cost without your prior approval.

**CLOSURE**

You may authorize our services by issuing a Task Order or contract amendment.

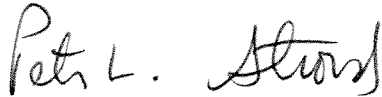
We appreciate the opportunity to present this confirming proposal and look forward to providing services to the City of Newberg for this project. If you have any questions regarding the contents of this proposal or require additional information, please call us at (503) 644-9447.

Sincerely,

**KLEINFELDER, INC.**



Bart Bretherton, R.G.  
Project Manager



Peter L. Stroud, C.E.G.  
Environmental Group Leader

Attachments: Table 1 Project Cost Estimate

## PROJECT COST ESTIMATE

Sampling Oversight With Analytical Laboratory  
 Intersection of College and Illinois  
 River Street Sewer Project  
 Newberg, Oregon

Ref: 60yp5569  
 Created: 15-Jan-01  
 By: BGB  
 Revised:

NOTE: Refer to Kleinfelder amended proposal dated January 15, 2001 for specific scope of work.

WORK TASK DESCRIPTION	PERSONNEL AND HOURLY RATES (P05 Rate Table)						TOTAL HOURS	TOTAL LABOR AMOUNT
	Principal	P. Geologist	S. Engineer	Engineer	Tech./Draft.	Clerical		
	\$95	\$75	\$80	\$65	\$45	\$42		
Sample Collection Oversight	1	1	0	12	0	0	14	\$950
Communications with DEQ	1	2	0	0	0	0	3	\$245
Disposal Permitting	0	1	0	4	0	0	5	\$335
Report Preparation	0	0	0	0	0	0	0	\$0
<b>TOTAL LABOR</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>22</b>	<b>\$1,530</b>

### DIRECT EXPENSES

Mileage @ \$0.4/mi.	\$40
Per Diem	\$0
Soil Sampling Equipment	\$50
Report Production	\$0
<b>Total:</b>	<b>\$90</b>

### SUBCONTRACTOR COSTS

Analytical Laboratory (assuming Specialty Analytical)	\$1,599
Drilling	\$0
<b>Total:</b>	<b>\$1,599</b>

### PROJECT TOTALS AND SUMMARY

Total Labor Cost	\$1,530
Direct Expenses	\$90
Subcontractor Costs	\$1,599
<b>PROJECT TOTAL</b>	<b>\$3,219</b>

**CITY OF NEWBERG  
PROFESSIONAL SERVICES AGREEMENT AMENDMENT NO. 2  
September 22, 2000**

**Project:** Fire Station and Public Works Yard Groundwater Investigations  
**Consultant:** Kleinfelder, Inc.

---

**Summary of Proposed Changes:**

**1. Work Involved:**

Expand scope to include a generic risk-based evaluation report dealing with the parcel at 500 West Third Street, Newberg ("the Public Works Yard"), as described in a December 13, 1999 letter to the City from Kleinfelder (Attachment A), and further discussed in a January 11, 2000 letter to the City from Kleinfelder (Attachment B).

**2. Cost Summary:**

Original contract amount:	\$29,275
Net change by previous amendments:	<u>950</u>
Previous total:	\$30,225
This amendment:	<u>3,400<sup>1</sup></u>
Amended contract amount:	<b>\$33,625</b>

**3. Contract Time:**

Contract time is extended through January 31, 2001.

All other provisions of the professional services agreement remain in force.

---

**ACCEPTANCE SIGNATURES:**

**Kleinfelder, Inc.:**

Peter L. Strand      10-6-00  
Consultant              Date  
  
Peter L. Strand  
Name                      Title  
Environmental Group Leader

**City of Newberg:**

Terrence D. Mahr  
Duane R. Cole, acting      Date  
City Manager                      C.M.

**Approved as to form:**

Terrence D. Mahr  
Terrence D. Mahr,              Date  
City Attorney

---

1. As quoted in a letter to the City from Kleinfelder dated September 18, 2000 (Attachment C).

# ATTACHMENT A



**KLEINFELDER**

*An employee owned company*

December 13, 1999  
Kleinfelder Project Number 60-5289-01 (B01)

Mr. Roger Pyles, P.L.S.  
City of Newberg  
Community Development  
P.O. Box 970  
Newberg, OR 97132

Subject: **Request for Authorization  
Risk-Based Corrective Action Plan  
Operations And Maintenance Yard  
500 West 3<sup>rd</sup> Street  
Newberg, Oregon**

Dear Mr. Pyles:

The purpose of this letter is to request authorization to prepare a Risk-Based Corrective Action Plan (CAP) for the Operations and Maintenance Yard site located at 500 West 3<sup>rd</sup> Street in Newberg, Oregon. As discussed with you on December 7, 1999, the Oregon Department of Environmental Quality (DEQ) requires a CAP to evaluate project findings, assess potential additional data requirements, and document the suitability of a No Further Action determination for the site. The CAP will summarize previous investigation results to date for the subject property and evaluate soil and groundwater analytical data to identify appropriate Risk-Based Concentrations (RBCs) provided in the newly revised DEQ rules specified in the *Risk-Based Decision Making for the Remediation of Petroleum Contaminated Sites* guidance document (September 29, 1999).

The cost for preparation of a CAP was not included in an original scope of work, Exhibit A of the City of Newberg Agreement with Kleinfelder, Inc., to Provide Consulting Services (Agreement), dated May 19, 1998. Preparation of a CAP was stipulated in Exhibit A as a potential additional task if impacted groundwater was encountered. Data collected to date have indicated that low levels of residual petroleum hydrocarbon constituents were detected in groundwater. Based on our findings, it is our opinion that the CAP will satisfy DEQ requirements and allow for a No Further Action determination.

The estimated cost for preparation of the CAP is approximately \$4,500. Following receipt of your written authorization to proceed, Kleinfelder will initiate the work. Our work will be conducted in accordance with the terms and conditions outlined in our May 19, 1998, Agreement with the City of Newberg.

L:\1999\PROJECTS\528901\6029L187.DOC  
COPYRIGHT 1999 KLEINFELDER, INC.

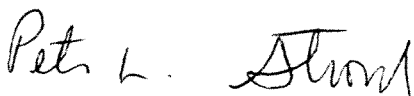
Please indicate your approval of this supplemental authorization by signing below and returning a copy to Kleinfelder. Kleinfelder appreciates the opportunity to offer these services to you. Please call if you have any questions.

Sincerely,

**KLEINFELDER, INC.**



David Lamadrid  
Project Geologist



Peter L. Stroud, CEG  
Senior Engineering Geologist  
Environmental Group Leader

Client: \_\_\_\_\_

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

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

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

# ATTACHMENT B



**KLEINFELDER**

*An employee owned company*

January 11, 2000  
Kleinfelder Project Number 60-5289-01 (B01)

Mr. Roger Pyles, P.L.S.  
City of Newberg  
Community Development  
P.O. Box 970  
Newberg, OR 97132

Subject: **Letter of Explanation  
Generic Risk-Based Evaluation  
Operations and Maintenance Yard  
500 West 3<sup>rd</sup> Street  
Newberg, Oregon**

Dear Mr. Pyles:

Kleinfelder, Inc., recently submitted to the City of Newberg a Request for Authorization (dated December 13, 1999) to prepare a Risk-Based Corrective Action Plan (CAP) for the above-referenced site. This letter was prepared to briefly describe the regulations requiring preparation of the risk-based evaluation and summarizes what an evaluation typically contains.

When Kleinfelder first installed groundwater monitoring wells at the City of Newberg Operations and Maintenance Yard site, it was unknown if sufficient environmental impact would be detected to merit future remediation. If the groundwater quality had met drinking water quality criteria, out scope would have only included one year of monitoring to demonstrate stable conditions. However, environmental impact to groundwater was detected after the wells were installed and sampled. The groundwater quality did not meet the stricter groundwater quality criteria but appears to meet cleanup requirements for risk-based closure. For risk-based closure, the Oregon Department of Environmental Quality (DEQ) requires submittal of a risk-based evaluation report to document site conditions, describe site characterization results, and evaluate risk-based criteria for the recommended closure. The City's original scope for the project did not include preparation of a risk-based evaluation report because it was not known earlier if an evaluation would be necessary.

Based on our findings to date, it is our opinion that a risk-based evaluation will satisfy DEQ requirements and allow for a No Further Action determination for the site. The cleanup rules for leaking petroleum underground storage tank (UST) systems are specified in the Oregon Administrative Rules 340-122-0205 through 0360 (DEQ, 1998).

L:\2000\PROJECTS\528901\6029L187.DOC  
COPYRIGHT 2000 KLEINFELDER, INC.

A UST cleanup can be considered complete by demonstrating that the site meets one of the following:

1. Soil matrix cleanup rules (impacted soil only).
2. Low-impact site requirements.
3. Site-specific risk-based evaluation.
4. Generic risk-based evaluation.

Option 1 is not a feasible option due to the presence of petroleum hydrocarbon impact to groundwater. Option 2 was not considered suitable since this option is applicable to sites where more significant contamination is present and closure would likely require a deed restriction. Due to the levels of environmental impact detected, implementation of a risk-based remedy is necessary (Options 3 or 4).

Options 3 and 4 are based on newly developed and recently updated risk-based cleanup levels specified in the DEQ document entitled *Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites* (RBDM), dated September 29, 1999. Both options require preparation of a risk-based evaluation report and include many of the same components. Based on the relatively low levels of contamination at the site, we recommend the evaluation report utilize generic risk-based remedy guidelines.

Generic, risk-based soil and groundwater cleanup levels for petroleum related compounds are based on the potential exposure pathways present at a site as determined by a site-specific conceptual model (CSM). A CSM describes known or suspected sources of contamination, considers how and where the contaminants are likely to move (potential pathways), and identifies who is likely to be affected by them (potential receptors). The CSM must consider both current and reasonably likely future uses of land and groundwater in the vicinity of a site. As a result, limited research of current and future uses of land and groundwater will be performed as part of the risk-based evaluation, as well as an evaluation of project data collected to date. Analytical data collected for the site will be compared to generic Risk-Based Concentrations (RBCs) available for the exposure pathways identified to demonstrate that constituents of potential concern do not pose an unacceptable risk at the site.

The risk-based evaluation report will be prepared in accordance with the guidelines provided in the RBDM document. A large portion of the evaluation will involve development of the CSM and evaluation of historic analytical data for the site. The components of the risk-based evaluation report are provided in a preliminary outline provided herewith.

Our goal with this final task is to meet the State's requirements to facilitate closure but to minimize costs as low as practical. Kleinfelder appreciates the opportunity to offer these services to you. Please call if you have additional questions or concerns regarding this letter or the project.

Sincerely,

**KLEINFELDER, INC.**



David Lamadrid  
Project Geologist



Peter L. Stroud, C.E.G.  
Senior Engineering Geologist  
Environmental Group Leader

Attachment: Preliminary Risk-Based Evaluation outline

## PRELIMINARY RISK-BASED EVALUATION OUTLINE

### Executive Summary

- 1.0 Introduction
- 2.0 Background
  - 2.1 Site Description
  - 2.2 Local Geology and Hydrogeology
- 3.0 Beneficial Land and Water Use
  - 3.1 Beneficial Land Use Survey
  - 3.2 Beneficial Water Use Survey
- 4.0 Utility Evaluation
- 5.0 Generic Risk-Based Evaluation
  - 5.1 Site History
  - 5.2 Previous Actions (describe all studies and remedial measures taken at the site)
  - 5.3 Summary of Impacts to Soil and Groundwater
    - 5.3.1 Summary of Impacts to Soil
    - 5.3.2 Summary of Impacts to Groundwater
  - 5.4 Contaminants of Potential Concern
  - 5.5 Exposure Pathway Analysis
  - 5.6 Conceptual Site Model
  - 5.7 Comparison of Site Analytical Data to Generic Risk-Based Concentrations
  - 5.8 Development of Contaminants of Concern
- 6.0 Corrective Action Measures
  - 6.1 Previous Corrective Action Measures
  - 6.2 Proposed Corrective Action Measures
- 7.0 Conclusions and Recommendations
- 8.0 Limitations
- 9.0 References

# ATTACHMENT C



## TRANSMITTAL

Date: September 18, 2000  
File: 60-5289-01

### To:

Mr. Michael Soderquist, PE, PLS, DEE  
City of Newberg Community Development Director  
P.O. Box 970, 414 E First Street  
Newberg, Oregon 97132

### Subject:

**Back-up Copies of Contract, Authorizations, and Invoices  
Fire Station and Public Works Yard Groundwater Investigations  
City of Newberg**

### Remarks:

Mike:

Attached please find back-up copies of our original contract for both the Fire Station and Public Works Yard projects. We did get authorized Change Order #1 for investigative derived waste disposal. Change Order #1 added \$950 to our original budget for a total authorized of \$30,225. During our work, we got a No Further Action determination from DEQ on the Fire Station. After monitoring the Public Works Yard for a year, we gathered sufficient data to apply for a risk-based closure. Attached you'll find our request for supplemental authorization for preparing a Risk-Based Evaluation Report. A Letter of Explanation for the risk-based assessment is also attached. Our original proposed scope did not include the risk-based evaluation. The Risk-Based Evaluation Report is required by DEQ for the Public Works Yard site to get a No Further Action status.

We have \$2,600 budget left from the original \$30,225 authorization. The Risk-Based Evaluation and report are estimated to cost \$6,000. For an additional authorization of \$3,400 (\$6,000-\$2,600) we can apply the budget reserve and complete the Risk-Based Evaluation. The City is up to date with payments and there are no outstanding invoices. Please review and provide your feedback.

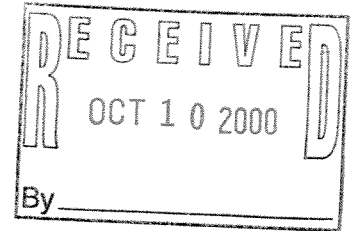
Sincerely,

Peter L. Stroud, C.E.G.  
Environmental Group Leader



**TRANSMITTAL**

Date: October 6, 2000  
File: 60-5289-01



**To:**

Mr. Michael Soderquist, PE, PLS, DEE  
City of Newberg Community Development Director  
P.O. Box 970, 414 E First Street  
Newberg, Oregon 97132

**Subject:**

**Return of Executed Amendment No. 2 for  
Public Works Yard Groundwater Investigation  
Risk-Based Evaluation for Site Closure  
City of Newberg**

**Remarks:**

Mike:

Thank you for the additional authorization to undertake the risk-based evaluation and submit the Public Works Yard for DEQ closure. We anticipate completing the Risk-Based Evaluation Report in 4 to 6 weeks. I will keep in touch with you during this period to keep you informed of our progress.

We appreciate the opportunity to work with the City on this project and look forward to getting the Public Works site closed!

**Sincerely,**

Peter L. Stroud, C.E.G.  
Environmental Group Leader

**CITY OF NEWBERG  
AGREEMENT WITH KLEINFELDER, INC.  
TO PROVIDE CONSULTING SERVICES  
TO THE CITY OF NEWBERG**

THIS CONTRACT is entered into this 19<sup>th</sup> day of May, 1998 by and between the City of Newberg, a municipal corporation of the State of Oregon, hereinafter called **City**, and Kleinfelder, Inc., hereinafter called **Consultant**.

**RECITAL**

1. City has need for the services of a Consultant with particular training, ability, knowledge, expertise and experience possessed by Consultant.

**NOW, THEREFORE, IN CONSIDERATION OF MUTUAL FEES AND PROMISES,  
THE PARTIES AGREE AS FOLLOWS:**

1. **Scope of Work:** The Consultant agrees to provide the services provided in the Scope of Work which is Exhibit "A" and attached (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.

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

Maintenance Yard:	\$19,425.00
Fire Station:	\$ 9,850.00

The Consultant shall not exceed the fee for any task included in the fee proposal amount. If the Consultant sees 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 maximum 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 and forfeits any right.

3. **Additional Work Not Shown Within The Scope of Work:** If City requests or requires work to be done not within the Scope of Work in this project, the Consultant shall notify the City of such work, give an estimated fee amount, and obtain written instructions to proceed with work in the form of a contract 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 contract amendment, the Consultant waives any right to collect fees for work performed.
4. **Status:** Consultant is not currently employed by the City. The parties to this contract intend that the relationship between them created by this contract is that of an employer-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 contract; 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.

5. **Work Performed:** The work to be performed by Consultant includes services generally performed by Consultant in his or her usual line of business.
6. **Taxes:** Consultant will be responsible for any federal or state taxes applicable to payments received under this contract. 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.
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 contract payment except as a self-employed individual.
8. **Federal Employment Status:** In the event any payment made pursuant to this contract 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. **Hold Harmless:** Consultant shall defend, indemnify and hold harmless City from and against all liability or loss and against all claims or actions based upon or arising out of damage or injury to persons or property caused by or sustained in connection with the negligent acts, errors, and omissions of the Consultant.
10. **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 contract, 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 Comprehensive General Liability insurance policy for at least \$1,000,000 combined single limits per occurrence for Bodily Injury, Property Damage, and Personal Injury. If the policy is written on the new occurrence form then the aggregate limit shall be \$2,000,000.
  - c) Consultant will at all times carry a Professional Liability/Errors and Omission type policy with limits of at least \$500,000. 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 contract.
  - d) Consultant shall furnish the City with Certificates of Insurance upon execution

of contract and City acknowledges receipt of such Certificates of Insurance.

11. **Indemnification:** The City of Newberg, 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 paragraph 10(b) above. A certificate of insurance evidencing any policies required by this contract 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.
12. **Employees' Taxes:** Consultant shall also defend, indemnify and hold harmless City against all liability and loss in connection with and shall assume full responsibility for, payment of all federal, state and local taxes or contributions imposed or required under unemployment insurance, social security and income tax laws, with respect to Consultant's employees engaged in the performance of this contract.
13. **Termination:** This contract may be terminated by either party at the end of a project phase as defined in Exhibit "A" or at any time upon 30 days written notice.
14. **Contract Duration:** Except as provided for under paragraph 3, the duration of this contract shall be in accordance with Exhibit "A" or until project completion, whichever comes first. This fact notwithstanding, the services of Consultant shall be authorized and paid on a phase-by-phase basis as described in Exhibit "A".

IN WITNESS WHEREOF, THE PARTIES HAVE AFFIXED THEIR SIGNATURES BELOW.

By:	<u>Pete L. Stroud</u>	By:	<u>Quane R. Cole</u>
Name:	<u>Peter L. Stroud</u>	Name:	<u>Quane R. Cole</u>
Title:	<u>Environmental Group Leader</u>	Title:	<u>City Manager</u>
Date:	<u>5-8-98</u>	Date:	<u>May 19, 1998</u>

Approved as to form/content:  
Terrence D. Mahr  
Terrence Mahr, City Attorney

## Exhibit A

### SCOPE OF WORK

#### Level 2 Environmental Site Assessments Fire Station and Maintenance Yard Sites Newberg, Oregon

#### PROJECT UNDERSTANDING

##### **Fire Station** Background

The site is currently used by the City as a Fire Station. A 1,000-gallon gasoline underground storage tank (UST) was formerly located outside the southeast wall of the Fire Station and was removed in September 1991 by Staton Construction. The backfill material reportedly appeared contaminated and was excavated and stockpiled off-site. Laboratory analysis of soil samples collected following removal of the UST and apparently impacted soils did not indicate the underlying soils were impacted by petroleum hydrocarbons. Groundwater was encountered during UST decommissioning and a groundwater sample was collected for laboratory analysis. The analytical results indicated groundwater was impacted by gasoline-range petroleum hydrocarbons: benzene, toluene, ethylbenzene, and xylenes (BTEX); and total lead at concentrations exceeding the DEQ numeric groundwater cleanup levels for petroleum UST sites. Groundwater collected on March 31, 1992 from the UST excavation was analyzed for ethylene dibromide and ethylene dichloride (EDB/EDC) which were not detected.

Based on the groundwater analytical results, groundwater was sampled on a quarterly basis from a PVC pipe installed in the former UST pit excavation during backfilling activities. BTEX compounds were not detected during the last three quarters of groundwater monitoring. Groundwater at the site is assumed to flow to the west-southwest toward Chehalem Creek and the Willamette River. Subsequent to removal of the UST, the Fire Station has been expanded and now extends over the former UST location.

DEQ conducted a file review of the UST decommissioning documentation provided by the City and issued a letter dated March 16, 1995 presenting their findings. DEQ indicated the UST decommissioning and groundwater sampling was not performed in accordance with DEQ guidelines. Therefore, DEQ is requiring a groundwater investigation be performed in accordance with Oregon Administrative Rules (OAR) 340-122-240 and OAR 340-122-242.

DEQ issued a letter dated October 15, 1997 to the City summarizing previous correspondence and investigations at the Fire Station. The October 15, 1997 letter reiterated DEQ's request for further assessment of the groundwater and preparation of a groundwater investigation work plan to be submitted to DEQ.

Mr. Stroud met with the City and DEQ at the site on June 12, 1997 and participated in a phone conference on July 31, 1997. Mr. Stroud negotiated with DEQ on behalf of the City to minimize the State's requirements. Based on these discussions, Kleinfelder understands that in addition to the groundwater investigation, the scope of work is to include limited assessment of potentially impacted soils left in-place following decommissioning of the UST.

Kleinfelder contacted DEQ following receipt of your Request for Proposals. Based on our recent discussions, Kleinfelder understands that DEQ will accept data from Geoprobe and installation of monitoring wells will not be required at the Fire Station unless groundwater is determined to be impacted. A Geoprobe investigation can be conducted at a lower cost compared to monitoring well installation and abandonment. DEQ has also requested that samples be evaluated for hydrocarbon type to confirm the type of petroleum hydrocarbon release (gas, diesel, or oil-range petroleum hydrocarbons).

### Objective

The objective of the investigation is to: 1) assess the nature and extent of potentially impacted soil left in place following removal of the UST; 2) evaluate the nature and extent of potential impacts to groundwater; and 3) develop strategies for closure and ultimately obtain a no further action status for the site from DEQ. Our proposed approach is to use a Geoprobe investigation to satisfy DEQ soil and groundwater concerns and avoid installation and long-term monitoring of groundwater monitoring wells. Based on existing site data, we are assuming that the analytical results of the Geoprobe samples will not reveal sufficient contamination to merit further groundwater monitoring.

### **Maintenance Yard**

#### Background

The site was developed in 1969 as an Operation and Maintenance facility. The site is currently used as a vehicle maintenance station and contains one building which is located on the southern portion of the site. A 1,000-gallon gasoline UST was installed in 1969; a 5,000-gallon gasoline tank was installed in 1974; and a 1,000-gallon diesel UST was installed in 1985 at the site. The USTs were located north of the building.

The three USTs were removed in September 1991. Laboratory analysis of soil samples collected following removal of the tanks indicated the subsurface soils were impacted by gasoline-range petroleum hydrocarbons at concentrations exceeding DEQ Level 3 Soil Matrix cleanup levels. Excavation of impacted soil was performed on October 24, 1991, and soil samples collected from the excavation indicated gasoline-range petroleum hydrocarbons were present in the sidewalls of the excavation at concentrations exceeding DEQ Level 3 Soil Matrix cleanup levels.

Four exploratory test pits were excavated on March 25, 1992 and soil and groundwater samples were collected for laboratory analysis. The analytical results indicated soils impacted by BTEX constituents were present and exceeded the DEQ soil cleanup level for benzene in some samples at and above the soil/water interface. A groundwater sample collected from one of the test pits also detected BTEX compounds and naphthalene at concentrations exceeding DEQ numeric groundwater cleanup levels for petroleum UST sites.

Based on the test pit soil and groundwater analytical results, groundwater was pumped out of the UST excavation during a period from April through May 1992 in an effort to reduce the levels of contamination in the excavation. This procedure was determined not to be effective and the City decided to excavate the impacted soil. Soil confirmation samples collected following completion of additional soil excavation indicated benzene was detected at concentrations exceeding DEQ soil cleanup levels in several soil samples collected at 14 to 15 feet below ground surface (bgs) and one soil sample collected at 7 feet bgs from the north edge of the excavation. Groundwater samples collected from the excavation after soil excavation indicated benzene was present at concentrations exceeding DEQ numeric groundwater cleanup levels. Groundwater at the site is assumed to flow to the southwest toward Chehalem Creek.

Mr. Stroud met with the City and DEQ at the site on June 12, 1997 and participated in a phone conference on July 31, 1997. Mr. Stroud negotiated with DEQ on behalf of the City to minimize the State's requirements. Based on these discussions, we understand that the DEQ is requiring the groundwater and soil in the vicinity of the former UST nest be assessed for potential impact.

Kleinfelder contacted DEQ following receipt of your Request for Proposals. Based on these recent discussions, Kleinfelder understands that DEQ will require installation of monitoring wells at this site and requests soil samples be collected from each of the monitoring well soil boring prior to well installation for laboratory analysis. In addition, DEQ indicated analysis for EDB/EDC and dissolved lead can be discontinued if these compounds are not detected during the first monitoring well sampling event.

### Objective

The objective of the investigation is to: 1) evaluate the nature and extent of potential impacts to soil and groundwater; and 2) develop strategies for closure and ultimately obtain a no further action status for the site from DEQ. Our proposed approach is to drill three borings, collect soil samples from the borings, and install a monitoring well in each boring. One round of monitoring well sampling will be completed to assess groundwater quality. If significant groundwater impact is not detected additional monitoring well sampling should not be required. Based on existing site data, we believe it is likely that sufficient impact will be detected that additional quarterly groundwater sampling will be required.

## **PROJECT APPROACH**

Kleinfelder proposes the following approach to meet the objectives described above and the requirements of DEQ:

### **Work Plan Preparation and DEQ Interaction**

Kleinfelder will prepare a Level 2 ESA Work Plan for each site describing the scope of work presented below. The Work Plans will be prepared as a draft and submitted to the City for review. The City's comments will be incorporated into the final Level 2 ESA Work Plans and submitted to DEQ for approval.

Mr. Stroud has already met with DEQ onsite and anticipates interacting with DEQ throughout the project: to finalize the Work Plan, discuss investigative findings, and negotiate site closure. Based on the past involvement of our two key project personnel (Mr. Stroud and Mr. Yandell) with these two sites, the City, and DEQ, Kleinfelder has an excellent understanding of the scope of work and objectives of the investigation. Costs for DEQ interaction are included with our estimated costs for Work Plan preparation.

### **Level 2 Environmental Site Assessments**

The following scope of work describes our approach to investigate each site. We have proposed a Geoprobe investigation as an alternative to monitoring wells at the Fire Station.

#### FIRE STATION

##### Geoprobe Investigation

A Geoprobe investigation will be conducted in the vicinity of the former UST location and in the upgradient and downgradient directions. The purpose of the Geoprobe investigation is to: 1) evaluate if impacted soils are present along the north side of the former UST excavation where potentially impacted soil was reportedly left in place during the previous soil cleanup due to the close proximity of an adjacent building wall; and 2) evaluate groundwater quality.

The Geoprobe investigation will consist of up to four Geoprobe borings advanced to the water table for the collection of soil and grab groundwater samples. One boring will be located inside the building immediately north of the former UST location to evaluate if impacted soil is present, and potential impact to groundwater in the vicinity of the former UST. One boring will be located upgradient (northeast) of the Fire Station to evaluate background conditions and potential onsite migration of contaminants from off-site sources. Two borings will be located outside the building in the assumed downgradient (southwest) direction to evaluate potential impact to groundwater.

The borings will be advanced to an anticipated maximum depth of approximately 20 feet below ground surface (bgs). Groundwater is anticipated at approximately 15 feet bgs. Soil samples will be collected at 5-foot intervals from 5 feet bgs to the bottom of the boring. The soil samples

will be field screened (observed for evidence of staining, sheen and odor; and screened for volatile organic compounds (VOCs) using an organic vapor meter (OVM)) and collected for laboratory analyses.

The one soil sample from each boring with the highest concentration of VOCs, as determined by field screening, or displaying evidence of petroleum hydrocarbon impact, will be submitted for laboratory analysis. If field screening results indicate none of the samples appear to be significantly impacted, then the sample from each boring collected at the soil/water interface will be submitted for laboratory analysis. Samples not analyzed will be archived in the event additional analyses are requested.

One grab groundwater sample will also be collected from the each Geoprobe boring for laboratory analysis to evaluate groundwater quality.

#### Monitoring Well Installation and Quarterly Groundwater Sampling (Optional)

If the results of the Geoprobe investigation indicate groundwater is significantly impacted, DEQ will likely require the installation of three monitoring wells to assess groundwater quality at the site as required by DEQ (OAR 340-122-242). As noted above, we do not anticipate that significant impact will be detected to merit groundwater monitoring. Our cost estimate does include a line item for groundwater monitoring at the Fire Station to show you worst-case costs. A description of monitoring well installation is included with the scope description for the Maintenance Yard.

#### Laboratory Analysis

The soil and groundwater samples will be submitted to an analytical laboratory for analysis. Please note that Kleinfelder has added MTBE analysis to select soil and groundwater samples. MTBE analysis will only be required if DEQ requires the site be closed using Risk Based Corrective Action (RBCA). Although this may not be required, we believe it is prudent to gather this information at this time so additional drilling inside the building will not be required for this purpose.

#### *Soil Analysis*

One soil sample collected from each of the Geoprobe borings will be analyzed for the following constituents:

- Petroleum Hydrocarbon Identification by Method NWTPH-HCID
- Gasoline-range petroleum hydrocarbons and BTEX/MTBE compounds by Method NWTPH-GX and EPA Method 8020, respectively

If diesel- or oil-range petroleum hydrocarbons or MTBE are detected, the concentrations will be quantified by the appropriate method. For the purpose of the cost estimate, Kleinfelder assumes quantification will not be required.

### *Groundwater Analysis*

The grab groundwater sample collected from the Geoprobe boring located within the building will be analyzed for the following constituents:

- Diesel- and Oil-range Petroleum Hydrocarbons by Method NWTPH-DX
- Gasoline-range Petroleum Hydrocarbons and BTEX/MTBE by Method NWTPH-GX and EPA Method 8020, respectively.
- Ethylene Dibromide (EDB) and Ethylene Dichloride (EDC) by EPA Method 8010
- Dissolved Lead by EPA Method 6010/7000

If diesel- or oil-range petroleum hydrocarbons or MTBE are detected, the sample will also be analyzed for polynuclear aromatic hydrocarbons (PAHs) by EPA Method 8270 SIM Mode and/or the concentration of MTBE will be quantified. For the purpose of the cost estimate Kleinfelder assumes PAH analysis or MTBE quantification will not be performed.

Groundwater samples collected from the three Geoprobe borings outside the building will be analyzed for the following constituents:

- Petroleum Hydrocarbon Identification by Method NWTPH-HCID
- Gasoline-range Petroleum Hydrocarbons and BTEX by Method NWTPH-GX and EPA Method 8020, respectively.

If the analytical results from the Geoprobe groundwater sample located inside the building indicate EDB/EDC or elevated concentrations of dissolved lead are present, the groundwater samples from the borings outside the building will also be analyzed for these constituents. However, for the purpose of the cost estimate, Kleinfelder assumes EDB/EDC or dissolved lead analysis will not be required from groundwater samples collected from borings outside the building.

The soil and groundwater analytical program for the monitoring wells, if required, will be based on the results of the Geoprobe investigation and discussions with DEQ. However, for the purpose of the cost estimate, Kleinfelder assumes sampling and analysis of monitoring well groundwater samples will not be required. Our cost estimate does include a line item for groundwater monitoring at the Fire Station to show you worst-case costs assuming groundwater will only be analyzed for BTEX by EPA method 8020.

## MAINTENANCE YARD

### Groundwater and Soil Sampling and Characterization

Kleinfelder recommends the drilling of three borings to screen and collect soil samples and facilitate the installation of three monitoring wells to assess potentially impacted soil and groundwater quality at the site as required by DEQ. Two of the soil borings/monitoring wells will be located in the assumed downgradient direction (southwest of the excavation) to assess the potential extent of impacted groundwater. One soil boring/monitoring well will be installed in

the upgradient direction (northeast) of the excavation to evaluate background groundwater quality.

The borings will be advanced to an anticipated maximum depth of approximately 20 feet bgs (approximately 5 feet into the uppermost water bearing zone). Groundwater is anticipated at approximately 15 feet bgs. Soil samples will be collected at 5-foot intervals from 5 feet bgs to the bottom of the boring. The soil samples will be field screened and collected as described for the Fire Station.

The one soil sample from each boring with the highest concentration of VOCs, as determined by field screening, or if impact is not apparent, from the soil/water interface, will be submitted for laboratory analysis. Samples not analyzed will be archived in the event additional analyses are requested.

The monitoring wells will be installed according to the Oregon Water Resources Department's rules for the construction and maintenance of monitoring wells (OAR 690-240-005 through -180). The monitoring wells will be constructed of 2-inch PVC casing with 10 feet of 10-slot well screen. The well screen will be placed to straddle the water table.

After the groundwater monitoring wells have been installed and developed, Kleinfelder will collect one groundwater sample from each of the newly installed monitoring wells for laboratory analysis. Strict environmental protocol will be observed while collecting, handling, and shipping the soil and groundwater samples to avoid cross contamination.

To evaluate groundwater flow direction, each of the well locations will be surveyed relative to a common elevation datum. The well head survey data and monitoring well water elevations will be used to calculate groundwater flow direction. Kleinfelder assumes the City can provide in-house surveying services and will survey the wells.

We anticipate that the three wells will be sampled once per quarter for four quarters. If the groundwater analytical results from the first sampling event indicate groundwater is not impacted, then additional groundwater sampling may not be required.

#### Laboratory Analysis

The soil and groundwater samples will be submitted to an analytical laboratory for analysis.

#### *Soil Analysis*

Soil samples will be analyzed for the following constituents:

- Petroleum Hydrocarbon Identification by Method NWTPH-HCID
- Gasoline-range petroleum hydrocarbons and BTEX/MTBE compounds by Method NWTPH-GX and EPA Method 8020, respectively

If petroleum hydrocarbons other than in the gasoline-range or MTBE are detected, the concentration will be quantified by the appropriate method. For the purpose of the cost estimate, Kleinfelder assumes quantification for petroleum hydrocarbons or MTBE will not be required.

#### *Groundwater Analysis*

Groundwater samples will be analyzed for the following constituents for the first sampling event:

- Diesel- and Oil-range Petroleum Hydrocarbons by Method NWTPH-DX
- Gasoline-range Petroleum Hydrocarbons and BTEX by Method NWTPH-GX and EPA Method 8020, respectively.
- Ethylene Dibromide (EDB) and Ethylene Dichloride (EDC) by EPA Method 8010
- Dissolved Lead by EPA Method 6010/7000

If Total Petroleum Hydrocarbons (TPH) are detected, the sample will also be analyzed for polynuclear aromatic hydrocarbons (PAHs) by EPA Method 8270 SIM Mode. For the purpose of the cost estimate Kleinfelder assumes PAH analysis will not be performed.

The quarterly groundwater sampling analytical program for the monitoring wells, if required, will be based on the results of the initial sampling event and discussions with DEQ. However, for the purpose of the cost estimate, Kleinfelder assumes the quarterly groundwater samples will only be analyzed for the following constituents:

- BTEX by EPA Method 8020

#### **Data Evaluation and Reporting**

The data collected at each site will be evaluated by Kleinfelder to assess potential impact to soil and groundwater. The results of each investigation will be presented in separate UST Decommissioning Reports that will include background information, analytical results, our findings, and conclusions. The reports will also present the history of the UST decommissioning at each site including soil and groundwater characterization and remediation activities. Assuming the analytical results indicate the concentrations of the compounds of concern are below DEQ cleanup levels, the report will be presented in a format suitable for submittal to DEQ to obtain closure and request no further action for the site. Each UST Decommissioning Report will be prepared as a draft and submitted to you for review. Your comments will be incorporated into a final UST Decommissioning Report and submitted to DEQ with a request for no further action.

Please note that if impacted groundwater is identified at the Fire Station, additional work such as installation of monitoring wells and quarterly groundwater monitoring for one year, or application of Risk Based Corrective Action (RBCA) may be required by DEQ to obtain site closure. Similarly, if the initial sampling event at the Maintenance Yard indicates groundwater is impacted, additional work such as quarterly groundwater monitoring for one year, or application of Risk Based Corrective Action (RBCA) may be required by DEQ to obtain site closure. If our

findings indicate additional work is necessary at either site and current site conditions are not favorable to obtain closure, we will discuss our findings with you and present recommendations on how to proceed. However, our costs do not include application of RBCA to either site. We will also negotiate with DEQ to minimize requirements for the City and clearly identify what follow-up work will be required, if any.

If monitoring wells are installed and quarterly sampling is initiated at one or both sites, Kleinfelder will also prepare quarterly groundwater sampling reports presenting the sampling results.

## **PROJECT SCHEDULE**

Kleinfelder is prepared to initiate the Level 2 ESAs after receipt of your written authorization. Preparation of the Work Plans will be completed within two weeks of receipt of written authorization to proceed and submitted to the City for review and comment. Following receipt of your comments, the Work Plans will be finalized and submitted to DEQ within three working days. Field work will be scheduled upon receipt of approval by DEQ. Following approval of the Work Plans by DEQ, field work will be scheduled based on subcontractor availability.. Geoprobe drilling and monitoring well installation and sampling are anticipated to be completed in two days for each site. Analytical results will be available two weeks from receipt of the samples by the laboratory. We request the survey results be provided within two weeks after well installation. We anticipate being able to provide three copies of a report to you within two weeks of receipt of the final analytical results and survey data.

**PROFESSIONAL FEES**

Kleinfelder proposes to perform the scope of work described above for the total guaranteed maximum fee amount indicated below in accordance with the attached "City of Newberg Agreement with Kleinfelder, Inc., to Provide Consulting Services to the City of Newberg". Kleinfelder will submit invoices to the City on a monthly basis. For the scope of work outlined above our estimated costs are as follows:

TASK/ITEM	FEE PROPOSAL AMOUNT	
	Maint. Yard	Fire Station
1) Work Plan Prep.	<u>\$ 1,500</u>	<u>\$1,500</u>
2) Monitoring Well Installation (3 wells)	<u>\$ 5,600</u>	<u>\$5,600</u>
3) Geoprobe Investigation (4 geoprobes)		<u>\$3,400</u>
4) One Geoprobe Inves. and Sampling Event (labor and analytical testing)		<u>\$800</u>
5) Chemical Analytical Test. (3 wells, 4 quarters)	<u>\$ 2,125</u>	<u>\$750</u>
6) Chemical Analytical Test. (4 Geoprobes, 1 Event)		<u>\$1,300</u>
7) Quarterly Groundwater Sampling (4 events, Labor only)	<u>\$ 3,350</u>	<u>\$3,350</u>
8) Data Analysis and Report Preparation (w/DEQ Interaction)	<u>\$ 3,650</u>	<u>\$3,650</u>
9) Quarterly Groundwater Sampling Reports (3 Events)	<u>\$ 3,200</u>	<u>\$3,200</u>
<b>Total Guaranteed Maximum Fee Amount</b>	<b><u>\$19,425<sup>A</sup></u></b>	<b><u>\$9,850<sup>B</sup></u></b>

A- Costs include Tasks 1,2,5,7,8, and 9 only

B- Costs include Tasks 1,3,6, and 8 only

**Assumptions**

The following assumptions have been used to develop the estimated costs for this proposal. Project schedule and cost may be affected if these assumptions prove to be incorrect.

1. Groundwater beneath the site is 15 feet bgs or less, and subsurface conditions are conducive to hollow-stem auger and Geoprobe drilling techniques.
2. Quantification of soil samples analyzed by DEQ Method TPH-HCID for diesel- or oil-range petroleum hydrocarbons, PAH analysis, or MTBE quantification will not be required, and quarterly groundwater samples will only be analyzed for BTEX.
3. Sample analysis will be performed at the standard turnaround time of 5 to 10 business days.
4. The location of underground utilities will be the responsibility of the City of Newberg. If you cannot identify the location of underground utilities, we recommend a utility locating service be notified and utilities in the proposed work areas be clearly marked. Kleinfelder is available to

arrange for the utility locating service, if requested. For the purpose of the cost estimate, Kleinfelder assumes an independent utility locating service will not be required.

5. Drill cuttings and purge water generated from field activities will be containerized in 55-gallon drums, labeled, and left on-site. The drums and their contents will be the responsibility of the City. Disposal options for the drummed material depend upon laboratory results. Kleinfelder is available to assist in arranging for disposal of the drummed material, if required.

6. Tap water, electricity, and a location for steam-cleaning the drilling rig will be available on-site.

## **LIMITATIONS**

The proposed scope of work is intended to provide an assessment of possible contamination of soil and groundwater at the subject sites. However, these assessments are not designed to identify all potential concerns or to eliminate all risk associated with the property. Even the most rigorous of professional assessments may fail to identify all existing conditions. Confirmation of suspected contamination, by sampling of soil and groundwater is limited to that described in this scope of services. No warranty, express or implied, is made.