# PACIFIC groundwater GROUP

December 14, 2015

City of Camas 616 NE Fourth Avenue Camas, WA 98607

Attn: Mr. Steve Wall

Re: Hydrogeolgic Support Services

Dear Steve:

This letter provide a scope of work and cost estimate to provide the City with on-going technical assistance for managing your water supply sources as well as planning for new source development to meet continuing growth targets.

#### SCOPE OF WORK

## Task 1 - Maintenance of Surface Water and Groundwater Monitoring Stations

Activities to include:

- Servicing data loggers that are used to capture groundwater level information in the Washougal River wellfield area and surface water data from the Washougal River stage gage
- Periodic reduction and analysis of monitoring data

### Task 2 - Hydrogeologic Support Service

Hydrogeologic support services may include:

- Assessment of wellfield performance and providing input when needed to asses question on drought conditions and other factors that might arise.
- Assistance with regulatory questions and water right permitting issues
- Responding to water right purchase opportunities
- Addressing question related to potential environmental threats to the supply sources
- Assistance with new source development

## Task 3 - Management and Meetings

PGG's Project Manager will prepare and document invoices, manage staff resources and the project schedule, and communicate with City representatives regarding project logistics, schedule, and technical issues as the project unfolds. We will also attend meeting when needed to assist the City with strategic planning, permitting questions, negotiation of water right purchases, and technical issues.

#### PROJECT COST ESTIMATE

PGG estimates that the costs associated with the proposed scope of work will be \$15,000, including expenses. Cost estimate details are provided in Table 1, attached. Since specific details on the nature of our services cannot be explicitly defined at this time, the authorization should be considered as preliminary and subject to change depending on specific City requests for assistance.

Our costs will be invoiced monthly on a time-and-materials basis. In the event that unexpected information is encountered that appears to require additional work, PGG will bring them to your attention and seek your approval for any added expenditures. Our professional services will be performed, our findings obtained, and our reports prepared in accordance with generally accepted hydrogeologic practices. This warranty is in lieu of all other warranties, either express or implied.

Please call if you should have any questions concerning the enclosed information.

Sincerely,

**Pacific Groundwater Group** 

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Dan Matlock

Principal Hydrogeologist

Table 1 - Hydrogeologic Support Services - City of Camas Pacific Groundwater Group

# JM9702.19

|      |                                  | ESTIMATED HOURS |                     |       |           | OTHER COSTS <sup>1</sup> |         |         | TOTAL      |             |
|------|----------------------------------|-----------------|---------------------|-------|-----------|--------------------------|---------|---------|------------|-------------|
|      |                                  | Support         | Permit              | GIS   | Principal | Labor                    | Direct  | Mileage | Sub- RM    | TASK        |
|      |                                  | \$60            | Specialist<br>\$130 | \$115 | \$160     | Cost                     | Costs   |         |            | COST        |
| Task | Description                      |                 |                     |       |           |                          |         |         |            |             |
|      |                                  |                 |                     |       |           |                          |         |         |            |             |
| 1    | Maintenance of Surface Water and |                 |                     |       | 16        | \$ 2,560.00              |         | 300.00  | 2,300.00   | \$ 5,160.00 |
|      | Groundwater Monitoring Stations  |                 |                     |       |           |                          |         |         |            |             |
| 2    | Hydrogeologic Support Services   |                 | 12                  | 4     | 36        | \$ 7,780.00              |         |         |            | \$ 7,780.00 |
|      | Project Management and Meetings  | 4               | 4                   |       | 8         | \$ 2,040.00              | 20.00   |         |            | \$ 2,060.00 |
|      | Subtotal                         | 4               | 16                  | 4     | 60        | \$12,380.00              | \$20.00 |         | \$2,300.00 | \$15,000.00 |
|      |                                  |                 |                     |       |           |                          |         |         |            |             |

Notes:

<sup>1)</sup> Includes 10% markup