

**Jacobs**<sup>®</sup>

**Water Treatment Plant Start-Up**  
City of Camas

January 8, 2026



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**Project manager:** Jack Wallis, PE  
**Prepared by:** Jack Wallis, PE  
**Approved by:** Dan Shafar, PE ENV SP  
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**Jacobs Project Management Co.**

2020 SW Fourth Avenue  
3rd Floor  
Portland, OR 97201  
United States

T +1.503.235.5000  
[www.jacobs.com](http://www.jacobs.com)

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## Contents

<b>Project Understanding .....</b>	<b>1</b>
<b>Background.....</b>	<b>1</b>
<b>Scope of Work.....</b>	<b>1</b>
Task 1 – Project Management.....	1
Task 2 – Pre-Start-up Services.....	2
Task 3 – WTP Start-up Services .....	3
<b>Schedule .....</b>	<b>4</b>
<b>Cost  4</b>	
Billing Rates.....	4

## Attachments

<b>Attachment B – Level of Effort .....</b>	<b>5</b>
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## Project Understanding

The City of Camas (City) has requested a new contract for startup-assistance for the City's existing Water Treatment Plant (WTP). This contract builds upon the history of preceding work completed between 2020 and 2024. The following summarizes the previous contract history:

Contract	Contract Schedule	Contract Cost
Original Contract   December 2020	Dec 2020 → Nov 2021	\$34,910
Amendment 1   December 2021	Nov 2021 → Jun 2022	<i>No change</i>
Amendment 2   June 2022	Jun 2022 → Dec 2022	<i>No change</i>
Amendment 3   November 2022	Dec 2022 → Dec 2023	<i>No change</i>
Amendment 4   November 2023	Dec 2023 → Dec 2024	<i>No Change</i>

Recent attempts to complete startup of the slow sand filter have been complicated by a number of factors including wildfires within the watershed, required maintenance at the watershed intakes, on-going SCADA and I&C integration and service upgrades, and multi-party coordination including Jacobs, Carollo, S&B, Tomco, and Airgas.

The intent of this contract is to synchronize and simplify the start-up process by having Jacobs primarily responsible for scheduling and sequencing startup operations. Jacobs will provide coordination of vendor services, provide on-site supervision and start-up services of the slow sand filter, and provide additional training refresher for City staff. An allowance of on-call support for the first year of startup operations will be provided.

## Background

The City of Camas, WA (City) owns and operates a slow sand filter (SSF) water treatment plant (WTP) located near the intersection of NE Lessard Road and NE Winter Road. City staff have asked for assistance with startup of the plant since it is only operated seasonally and significant time has passed since the plant was last operated. The City has recently added caustic and carbon dioxide to the plant that has increased the complexity of the system. City staff have also noted that there may be air in the effluent line, which is causing issues with the accuracy of the flow meter. The City has requested that Jacobs Project Management Co. (Consultant) assist City staff with startup, training, and ongoing operations support.

## Scope of Work

Consultant shall perform the following tasks.

### Task 1 – Project Management

This task includes work necessary to effectively manage the work, including but not limited to:

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- Task management, internal reporting, and coordination with the City.
- Preparing and submitting bi-monthly invoices and progress reports for Consultant services.

#### **Assumptions**

- The duration of the project for budgeting project management purposes is assumed to be from January 2026 to July 2027. Invoicing is assumed to occur every other month.

#### **Deliverables**

- Bi-monthly invoices and progress reports during periods of activity.

## **Task 2 – Pre-Start-up Services**

Consultant will provide pre-start-up services including the following key activities:

- File necessary WA Department of L&I paperwork and notices for prevailing wage
- Review existing design documentation for Carbon Dioxide and caustic systems (design by Carollo Engineers).
- Coordinate and lead a conference call between City and TOMCO to strategize needs and approach for initial assessment site visit.
- Coordinate and participate in the initial assessment site visit between TOMCO and Air Gas to evaluate the existing condition of the tank and dosing systems.
- Coordinate final testing and completion of S&B's I&C upgrade for the plant.
- Provide updated notice to Washington Department of Health of anticipated start-up dates.

#### **Assumptions**

- Air Gas' time and materials will be invoiced directly to the City through their existing agreement (attached to this proposal).
- TOMCO Systems will provide one 8-hour site visit to inspect CO2 storage and feed system for proper installation and assessment of the idle system.
- Jacobs operations and maintenance staff will complete all work tasks (under supervised direction of TOMCO) for prevailing wage related work. Assumes 8-hour workday with two start-up operators on-site.
- This task includes travel related expenses for Jacobs and TOMCO.
- All City comments on draft memorandum will be provided in a consolidated format.

#### **Deliverables**

- Draft and final site visit summary memorandum in electronic format documenting work completed on-site, equipment condition and next steps.
- Certified payroll and prevailing wage documentation.

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## Task 3 – WTP Start-up Services

Consultant will complete WTP start-up services in coordination with the City and its operators. Start-up includes the following key activities:

- Coordinate vendor start-up services between TOMCO and Air Gas.
- One day of start-up services and plant testing in advance of vendor scheduled start-up services.
- Participate in start-up activities under the direction of TOMCO on-site. Assumes that Jacobs operations and maintenance team will complete all work tasks for prevailing wage related work. Assumes three 8-hour workdays with two start-up operators on-site. Includes labor for potential minor repairs under supervision of TOMCO for the CO2 tank and feed systems.
- One day of start-up services and plant operations following vendor scheduled start-up services.
- One-day of on-site training and refresher for City staff. Includes updates to the existing Operations and Maintenance manual (allowance of 40-hours to compile if needed).
- One day per month (assume for four months) of on-site support for City Water Operations.
- One day of on-site support during seasonal plant shut-down (April 2026).
- One day of on-site support during seasonal plant start-up (October 2026).
- Allowance of 20-hours for as-needed operational support (October – December 2026).

### Assumptions

- Air Gas' time and materials will be invoiced directly to the City through their existing agreement (attached to this proposal).
- Consultant will provide two O&M team members for five 8-hour working days during vendor start-up services.
- Consultant will provide one O&M team member for 8-hour working day during monthly operations and seasonal shut-down and start-up events.
- Consultant technical team including project manager and or design engineering support specialist will be on-site to assist with testing and coordination.
- S&B responsible for verifying point-to-point I&C verification, accuracy of flow meters and calibration check. City responsible for scheduling and coordination directly with S&B.
- A \$10,000 allowance included for TOMCO to provide as-needed small parts/equipment for potential repairs to the storage tank and feed systems.

### Deliverables

- Updated operations and maintenance manual.
- Update training materials.
- Site visit summary memoranda documenting work completed on-site.

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- Certified payroll and prevailing wage documentation.

## Schedule

The period of performance for this project is NTP through July 2027.

Consultant will work with the City to timely execute the anticipated schedule below.

- January & February 2026 – Subcontracting and scheduling vendor services.
- February 2026 – Site visits with Jacobs, Tomco, and Air Gas to assess existing carbon dioxide equipment condition and potential repairs.
- March 2026 – Vendor startup services including Tomco start-up and delivery of Carbon Dioxide.
- March 2026 thru May 2026 – City operates WTP with monthly site visits.
- June 2026 – Seasonal plant shut-down with one site visit.
- October 2026 – Seasonal plant start-up with one site visit.
- October 2026 thru May 2027 – City operates WTP with as-needed startup support.
- June 2027 – Contract close-out.

## Cost

Consultant will provide this scope of work on a time and materials basis with a not-to-exceed budget of \$178,465, unless authorized by a written Amendment. The task breakdown for the not-to-exceed amount is shown in Table 1.

**Table 1. Estimated Cost for Camas SSF Startup and Training Assistance**

Task	Labor Cost	Expenses	Total
1 – Project Management	\$13,161	\$0	\$4,600
2 – Pre-Start-up Services	\$29,561	\$10,065	\$38,711
3 – WTP Start-up Services	\$82,143	\$43,535	\$124,343
<b>TOTAL</b>			<b>\$178,465</b>

## Billing Rates

Compensation shall be in accordance with the provisions of the Professional Engineering Services Contract between City and Consultant. The labor rates included in Attachment B include a 3.15 multiplier on raw rates up to a cap of \$310/hour and a flat rate of \$115/hour on Consultant GID staff.

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## Attachment B – Level of Effort