

January 10, 2025

Mr. Swarnjit Boyal, P.E. Olivehurst Public Utility District 3433 1970 9th Street P.O. Box 670 Olivehurst, CA 95961

Dear Mr. Boyal:

Subject: Olivehurst Public Utility District Well No. 31 – DRAFT Proposal to Reduce Sand Production

In response to your request, Peterson Brustad Inc. (PBI) is pleased to provide Olivehurst Public Utility District (OPUD) with the following scope of work to provide hydrogeologic consulting services associated with Well 31.

Background

Well 31 produces sand and has had a drop in pumping capacity. The objective of this project is to resolve the sand production issue(s) and restore the pump station to its original pumping capacity.

PBI will first need to identify the source of the sand production. This will be followed by the design and implementation of a well repair program. The second step will be to determine if the reduction in well pumping capacity is a pump problem or if it is related to a loss of in well specific capacity (well yield). If it is a pump problem, it will either need to be repaired or replaced. If it is a well problem, mechanical and chemical efforts would be implemented to clean the well structure.

OPUD would like this well to be returned to service as soon as possible to meet summer water demands. The scope below is designed to thoroughly assess the problems and resolve the issues in a timely manner.

SCOPE OF WORK

The scope of work for this project includes the following tasks: (1) Data Review; (2) Well Assessment Program Design; (3) Well Testing and Modification Field Support Services; and (4) Well Rehabilitation Summary Report. These tasks are described in more detail below.

Task 1 – Data Review

PBI will provide a review of the following:

- 1) the recent well video
- 2) well records and as-built construction details
- 3) well pump information, setting depth, and operating parameters
- 4) previous well pump test information
- 5) water quality data

80 Blue Ravine Rd, Suite 280, Folsom, CA 95630 916-608-2212

Task 2 – Well Assessment Program Design

PBI will prepare an informal written program to assess the well structure using double swab tools, additional well surveys, conduct well repair work, provide well development pumping, and well pumping tests. PBI will select contractors with proven track records on well rehabilitation programs. PBI will then provide bid support services, including answering technical questions, evaluating bids, and recommending the award of a contract.

Task 3 – Well Testing and Modification Field Support Services

For each phase of the work plan, PBI will provide project oversight via remote updates. In addition, site meetings utilizing Facetime or Zoom could provide real time visual remote inspections, if required. PBI will adjust the field work to help maximize the efforts per task and to apply efforts to tasks providing the most benefit. This should help reduce the time needed for completion and thus reduce the cost of this project.

Task 4 – Well Rehabilitation Summary Report

PBI will assemble all pertinent well construction records and provide this information in a brief written report. The report will include a summary of the project, daily field reports, an inventory of the materials installed, a revised as-built well profile, well pumping test plots, a recommended pumping capacity, and the recommended pump setting depth.

PROJECT COST

The total PBI cost to perform the tasks described above is estimated to be \$25,000. This total does not include the Contractor services or water quality analysis. All billings will be made monthly on a Time and Materials (T&M) basis not to exceed the amount above amount without written OPUD approval. The PBI billing will be in accordance with our Schedule of Fees (attached).

The program outlined above will include our best efforts to reduce the sand production from OPUD Well 31. As with all well rehabilitation efforts, there is a chance that improvement will not be possible or that other well problems could be discovered or manifest during these efforts. Therefore, PBI cannot guarantee the project outcome, and will not be fiscally responsible for this well.

We look forward to working with you and OPUD on this project. If you have any questions or require additional information, please call me at (916) 417-7687.

Sincerely,

Lala

Tim Hasler, PE Group Leader, Project Manager 3

Junerence 91. Ernst

Lawrence H. Ernst, PG, CEG, CHG Hydrogeologist, Project Manager 2

Enclosures: VERDANTAS WEST 2025 STANDARD BILLING RATE SCHEDULE

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VERDANTAS WEST AREA WATER AND WASTEWATER SYSTEMS 2025 STANDARD BILLING RATE SCHEDULE

| Professional Services | Hourly Rate | CAD/Data Management | Hourly Rate |
|------------------------|-------------|--------------------------------|-------------|
| Project Manager I | \$220.00 | CAD Technician I | \$115.00 |
| Project Manager II | \$240.00 | CAD Technician II | \$125.00 |
| Project Manager III | \$260.00 | CAD Technician III | \$150.00 |
| | | CAD Technician IV | \$160.00 |
| Staff Engineer I | \$150.00 | | |
| Staff Engineer II | \$170.00 | <u>Support</u> | Hourly Rate |
| Staff Engineer III | \$180.00 | Administrative Coordinator I | \$80.00 |
| Project Engineer I | \$190.00 | Administrative Coordinator II | \$95.00 |
| Project Engineer II | \$200.00 | Administrative Coordinator III | \$105.00 |
| Project Engineer III | \$210.00 | Administrative Coordinator IV | \$120.00 |
| Senior Engineer I | \$220.00 | | |
| Senior Engineer II | \$240.00 | | |
| Senior Engineer III | \$260.00 | | |
| Principal Engineer | \$290.00 | | |
| Sr. Principal Engineer | \$330.00 | | |

NOTES:

- 1. Standard Billing Rates: Our standard billing rates are reviewed no less than annually and may be adjusted at those times.
- 2. A fee of 5% of labor will be added for in-house expenses (telephone, computer, incidental copying/printing).
- 3. Expert Testimony: Litigation, expert witness, and all other legal and court related appearances will be billed at twice the standard fee schedule rate. There is a minimum eight-hour charge per day and a minimum overall fee of \$2,000.00 per case.
- 4. Higher Hourly Rates: Certain services, such as emergency/rapid response consulting, may be subject to higher hourly billing rates as agreed upon on a project-specific basis.
- 5. Overtime: Overtime for time worked on a project exceeding 8 hours per day, Holidays, and/or Sundays will be billed at 1.5 times the standard rate.
- 6. Field Equipment and Supplies: Field equipment and supplies will be billed at fixed unit prices, subject to periodic updates.
- 7. Subcontractors and Project Expenses: All project-related expenses are chargeable at cost plus 10% or in accordance with the specific project agreement. Subcontractor charges, costs of rental of specialized equipment, and any other costs not associated with normal overhead are billed at cost plus 10% or in accordance with the specific project agreement.
- 8. Mileage: The mileage for personal vehicles will be billed at the current United States Internal Revenue Service reimbursement rate.
- 9. General Terms and Conditions: Please refer to the General Terms and Conditions for further details.

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January 14, 2025

Mr. Swarnjit Boyal, P.E. Olivehurst Public Utility District 3433 1970 9th Street P.O. Box 670 Olivehurst, CA 95961

Dear Mr. Boyal:

Subject: Olivehurst Public Utility District Well No. 31 – Proposal to Reduce Sand Production

In response to your request, Verdantas Inc. is pleased to provide Olivehurst Public Utility District (OPUD) with the following scope of work to provide hydrogeologic consulting services associated with Well 31.

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Sincerely,

Tim Hasler, PE Principal, Group Leader

Junerence 91. Ernst

Lawrence H. Ernst, PG, CEG, CHG Hydrogeologist, Project Manager 2

Enclosures: Verdantas West 2025 Standard Billing Rate Schedule

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VERDANTAS WEST AREA WATER AND WASTEWATER SYSTEMS 2025 STANDARD BILLING RATE SCHEDULE

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