



## INFORMATIONAL MEMORANDUM

TO: **Transportation and Infrastructure Committee**  
 FROM: **Hari Ponnekanti, Public Works Director**  
 BY: **Joshua Hopkins, Surface Water Project Manger**  
 CC: **Mayor Allan Ekberg**  
 DATE: **April 14, 2023**  
 SUBJECT: **Surface Water Fund – 2023 Annual Small Drainage Program**  
**Project No. 82341201**

### **ISSUE**

Approve a Contract with KPG Psomas Inc. for design and permitting services for the 2023 Annual Small Drainage Program.

### **BACKGROUND**

The Annual Small Drainage Program addresses surface water deficiencies that are identified through maintenance activities and citizen complaints. For the 2023 Annual Small Drainage Program, KPG Psomas will develop plans to address localized shoreline erosion and corresponding impacts to the Green River Trail beneath the Tukwila International Boulevard Bridge. A compensatory mitigation plan addressing environmental impacts will also be developed and submitted to the permit review agencies for concurrence. Construction is expected to occur during the 2024 in-water work window.

### **DISCUSSION**

Three firms (KPG Psomas, Otak and Pace) Statement of Qualifications were evaluated from the MRSC Consultant Roster. KPG Psomas was selected as the firm that best met the requirements due to their design and construction management services, work history with the City of Tukwila and the project site, and satisfactory performance on past projects. This contract includes design and permitting services from KPG Psomas and will include sub-contracts with Schnabel Engineering and GeoEngineers for structural engineering and environmental documentation.

### **FINANCIAL IMPACT**

KPG Psomas’ proposed fee for design and permitting is \$99,785.00. The 2023 Small Drainage Design budget is \$100,000.

|                     | <b><u>Consultant Fee</u></b> | <b><u>2023 Budget</u></b> |
|---------------------|------------------------------|---------------------------|
| KPG Design Contract | \$99,785.00                  | \$100,000.00              |

### **RECOMMENDATION**

Council is being asked to approve a Contract with KPG Psomas, Inc. for design and permitting services in the amount of \$99,785.00 for the 2023 Small Drainage Program and to consider this item on the Consent Agenda at the May 1, 2023, Regular Council Meeting.

#### Attachments:

- CIP Pg. 76
- KPG Consultant Agreement

## CITY OF TUKWILA CAPITAL PROJECT SUMMARY

2023 to 2028

**PROJECT:** Annual Small Drainage Program

Project No. 80041201

**DESCRIPTION:** Select, design, and construct small drainage projects throughout the City.

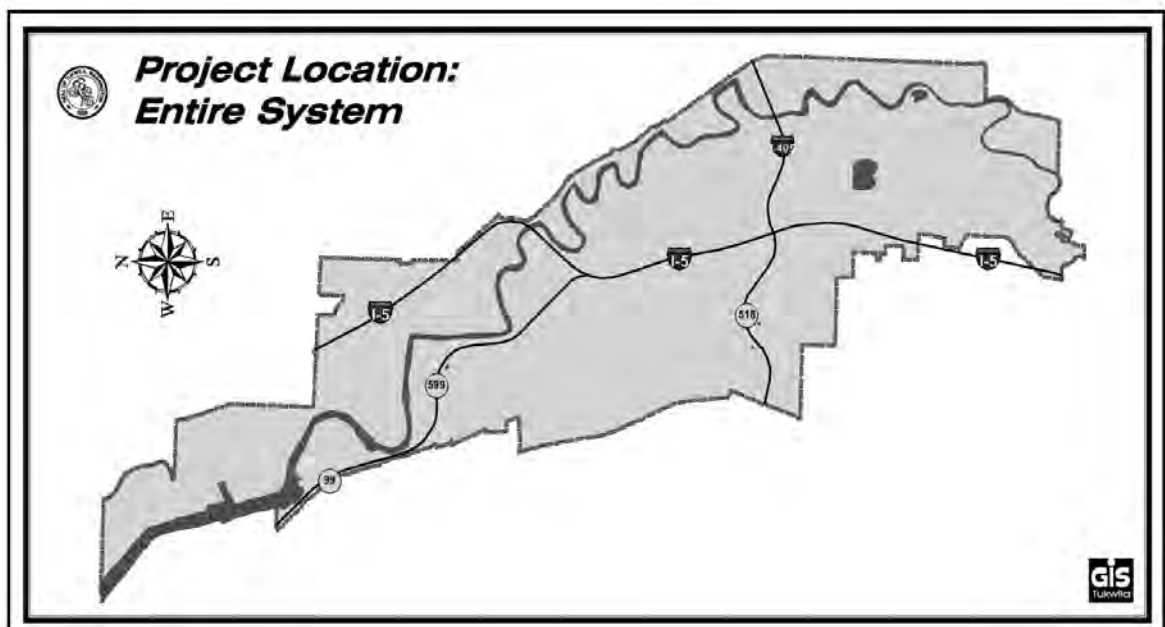
**JUSTIFICATION:** Provide drainage corrections for existing/ongoing drainage problems throughout the City, including culvert replacements, drain extensions, and pavement upgrades.

**STATUS:** Projects for this annual program are taken from Small Drainage Project List.

**MAINT. IMPACT:** Reduces maintenance.

**COMMENT:** Ongoing project, only one year shown in first column. Construction expenses may occur over two calendar years.

| FINANCIAL<br>(in \$000's) | Through Estimated |            |            |            |            |            |            |            |            |              |
|---------------------------|-------------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------|
|                           | 2021              | 2022       | 2023       | 2024       | 2025       | 2026       | 2027       | 2028       | BEYOND     | TOTAL        |
| <b>EXPENSES</b>           |                   |            |            |            |            |            |            |            |            |              |
| Design                    | 97                | 100        | 100        | 100        | 110        | 110        | 110        | 110        | 80         | 917          |
| Const. Mgmt.              | 136               | 99         | 100        | 100        | 110        | 110        | 110        | 110        | 80         | 955          |
| Construction              | 638               | 603        | 700        | 700        | 750        | 750        | 750        | 750        | 513        | 6,154        |
| <b>TOTAL EXPENSES</b>     | <b>871</b>        | <b>802</b> | <b>900</b> | <b>900</b> | <b>970</b> | <b>970</b> | <b>970</b> | <b>970</b> | <b>673</b> | <b>8,026</b> |
| <b>FUND SOURCES</b>       |                   |            |            |            |            |            |            |            |            |              |
| Awarded Grant             |                   |            |            |            |            |            |            |            |            | 0            |
| Proposed Grant            | 65                |            |            |            |            |            |            |            |            | 65           |
| Mitigation Actual         |                   |            |            |            |            |            |            |            |            | 0            |
| Mitigation Expected       |                   |            |            |            |            |            |            |            |            | 0            |
| Utility Revenue           | 806               | 802        | 900        | 900        | 970        | 970        | 970        | 970        | 673        | 7,961        |
| <b>TOTAL SOURCES</b>      | <b>871</b>        | <b>802</b> | <b>900</b> | <b>900</b> | <b>970</b> | <b>970</b> | <b>970</b> | <b>970</b> | <b>673</b> | <b>8,026</b> |





**PROFESSIONAL SERVICES AGREEMENT**

*(Includes consultants, architects, engineers, accountants, and other professional services)*

**THIS AGREEMENT** is entered into between the City of Tukwila, Washington, hereinafter referred to as “the City”, and **KPG Psomas Inc.**, hereinafter referred to as “the Consultant”, in consideration of the mutual benefits, terms, and conditions hereinafter specified.

1. **Project Designation.** The Consultant is retained by the City to perform **Design and Permitting services** in connection with the project titled **2023 Annual Small Drainage Project**.
2. **Scope of Services.** The Consultant agrees to perform the services, identified on Exhibit “A” attached hereto, including the provision of all labor, materials, equipment and supplies.
3. **Duration of Agreement; Time for Performance.** This Agreement shall be in full force and effect for a period commencing upon execution and ending **December 31, 2023**, unless sooner terminated under the provisions hereinafter specified. Work under this Agreement shall commence upon written notice by the City to the Consultant to proceed. The Consultant shall perform all services and provide all work product required pursuant to this Agreement no later than **December 31, 2023** unless an extension of such time is granted in writing by the City.
4. **Payment.** The Consultant shall be paid by the City for completed work and for services rendered under this Agreement as follows:
  - A. Payment for the work provided by the Consultant shall be made as provided on Exhibit “B” attached hereto, provided that the total amount of payment to the Consultant shall not exceed **\$99,785.00** without express written modification of the Agreement signed by the City.
  - B. The Consultant may submit vouchers to the City once per month during the progress of the work for partial payment for that portion of the project completed to date. Such vouchers will be checked by the City and, upon approval thereof, payment shall be made to the Consultant in the amount approved.
  - C. Final payment of any balance due the Consultant of the total contract price earned will be made promptly upon its ascertainment and verification by the City after the completion of the work under this Agreement and its acceptance by the City.
  - D. Payment as provided in this section shall be full compensation for work performed, services rendered, and for all materials, supplies, equipment and incidentals necessary to complete the work.
  - E. The Consultant’s records and accounts pertaining to this Agreement are to be kept available for inspection by representatives of the City and the state of Washington for a period of three (3) years after final payments. Copies shall be made available upon request.

5. **Ownership and Use of Documents.** All documents, drawings, specifications and other materials produced by the Consultant in connection with the services rendered under this Agreement shall be the property of the City whether the project for which they are made is executed or not. The Consultant shall be permitted to retain copies, including reproducible copies, of drawings and specifications for information, reference and use in connection with the Consultant's endeavors. The Consultant shall not be responsible for any use of the said documents, drawings, specifications or other materials by the City on any project other than the project specified in this Agreement.
6. **Compliance with Laws.** The Consultant shall, in performing the services contemplated by this Agreement, faithfully observe and comply with all federal, state, and local laws, ordinances and regulations, applicable to the services rendered under this Agreement.
7. **Indemnification.** The Consultant shall defend, indemnify and hold the City, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees, arising out of or resulting from the acts, errors or omissions of the Consultant in performance of this Agreement, except for injuries and damages caused by the sole negligence of the City.

Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Consultant and the City, its officers, officials, employees, and volunteers, the Consultant's liability hereunder shall be only to the extent of the Consultant's negligence. It is further specifically and expressly understood that the indemnification provided herein constitutes the Consultant's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purposes of this indemnification. This waiver has been mutually negotiated by the parties. The provisions of this section shall survive the expiration or termination of this Agreement.

8. **Insurance.** The Consultant shall procure and maintain for the duration of the Agreement, insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Consultant, its agents, representatives, or employees. Consultant's maintenance of insurance as required by the agreement shall not be construed to limit the liability of the Consultant to the coverage provided by such insurance, or otherwise limit the City's recourse to any remedy available at law or in equity.

A. **Minimum Amounts and Scope of Insurance.** Consultant shall obtain insurance of the types and with the limits described below:

1. **Automobile Liability** insurance with a minimum combined single limit for bodily injury and property damage of \$1,000,000 per accident. Automobile Liability insurance shall cover all owned, non-owned, hired and leased vehicles. Coverage shall be written on Insurance Services Office (ISO) form CA 00 01 or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage.
2. **Commercial General Liability** insurance with limits no less than \$2,000,000 each occurrence, \$2,000,000 general aggregate. Commercial General Liability insurance shall be at least as broad as ISO occurrence form CG 00 01 and shall cover liability arising from premises, operations, stop-gap independent contractors and personal injury and advertising injury. The City shall be named as an additional insured under the Consultant's Commercial General Liability insurance policy with respect to the work performed for the City using an additional insured endorsement at least as broad as ISO endorsement form CG 20 26.
3. **Workers' Compensation** coverage as required by the Industrial Insurance laws of the State of Washington.

4. **Professional Liability** with limits no less than \$2,000,000 per claim and \$2,000,000 policy aggregate limit. Professional Liability insurance shall be appropriate to the Consultant's profession.
  - B. **Public Entity Full Availability of Contractor Limits.** If the Contractor maintains higher insurance limits than the minimums shown above, the Public Entity shall be insured for the full available limits of Commercial General and Excess or Umbrella liability maintained by the Contractor, irrespective of whether such limits maintained by the Contractor are greater than those required by this Contract or whether any certificate of insurance furnished to the Public Entity evidences limits of liability lower than those maintained by the Contractor.
  - C. **Other Insurance Provision.** The Consultant's Automobile Liability and Commercial General Liability insurance policies are to contain, or be endorsed to contain that they shall be primary insurance with respect to the City. Any Insurance, self-insurance, or insurance pool coverage maintained by the City shall be excess of the Consultant's insurance and shall not be contributed or combined with it.
  - D. **Acceptability of Insurers.** Insurance is to be placed with insurers with a current A.M. Best rating of not less than A:VII.
  - E. **Verification of Coverage.** Consultant shall furnish the City with original certificates and a copy of the amendatory endorsements, including but not necessarily limited to the additional insured endorsement, evidencing the insurance requirements of the Contractor before commencement of the work. Upon request by the City, the Consultant shall furnish certified copies of all required insurance policies, including endorsements, required in this Agreement and evidence of all subcontractors' coverage.
  - F. **Notice of Cancellation.** The Consultant shall provide the City with written notice of any policy cancellation, within two business days of their receipt of such notice.
  - G. **Failure to Maintain Insurance.** Failure on the part of the Consultant to maintain the insurance as required shall constitute a material breach of contract, upon which the City may, after giving five business days notice to the Consultant to correct the breach, immediately terminate the contract or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the City on demand, or at the sole discretion of the City, offset against funds due the Consultant from the City.
9. **Independent Contractor.** The Consultant and the City agree that the Consultant is an independent contractor with respect to the services provided pursuant to this Agreement. Nothing in this Agreement shall be considered to create the relationship of employer and employee between the parties hereto. Neither the Consultant nor any employee of the Consultant shall be entitled to any benefits accorded City employees by virtue of the services provided under this Agreement. The City shall not be responsible for withholding or otherwise deducting federal income tax or social security or for contributing to the state industrial insurance program, otherwise assuming the duties of an employer with respect to the Consultant, or any employee of the Consultant.
  10. **Covenant Against Contingent Fees.** The Consultant warrants that he has not employed or retained any company or person, other than a bonafide employee working solely for the Consultant, to solicit or secure this contract, and that he has not paid or agreed to pay any company or person, other than a bonafide employee working solely for the Consultant, any fee, commission, percentage, brokerage fee, gifts, or any other consideration contingent upon or resulting from the award or making of this contract. For breach or violation of this warrant, the City shall have the right to annul this contract without liability, or in its discretion to deduct from the contract price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.

11. **Discrimination Prohibited.** Contractor, with regard to the work performed by it under this Agreement, will not discriminate on the grounds of race, religion, creed, color, national origin, age, veteran status, sex, sexual orientation, gender identity, marital status, political affiliation, the presence of any disability, or any other protected class status under state or federal law, in the selection and retention of employees or procurement of materials or supplies.
12. **Assignment.** The Consultant shall not sublet or assign any of the services covered by this Agreement without the express written consent of the City.
13. **Non-Waiver.** Waiver by the City of any provision of this Agreement or any time limitation provided for in this Agreement shall not constitute a waiver of any other provision.
14. **Termination.**
  - A. The City reserves the right to terminate this Agreement at any time by giving ten (10) days written notice to the Consultant.
  - B. In the event of the death of a member, partner or officer of the Consultant, or any of its supervisory personnel assigned to the project, the surviving members of the Consultant hereby agree to complete the work under the terms of this Agreement, if requested to do so by the City. This section shall not be a bar to renegotiations of this Agreement between surviving members of the Consultant and the City, if the City so chooses.
15. **Applicable Law; Venue; Attorney's Fees.** This Agreement shall be subject to, and the Consultant shall at all times comply with, all applicable federal, state and local laws, regulations, and rules, including the provisions of the City of Tukwila Municipal Code and ordinances of the City of Tukwila. In the event any suit, arbitration, or other proceeding is instituted to enforce any term of this Agreement, the parties specifically understand and agree that venue shall be properly laid in King County, Washington. The prevailing party in any such action shall be entitled to its attorney's fees and costs of suit. Venue for any action arising from or related to this Agreement shall be exclusively in King County Superior Court.
16. **Severability and Survival.** If any term, condition or provision of this Agreement is declared void or unenforceable or limited in its application or effect, such event shall not affect any other provisions hereof and all other provisions shall remain fully enforceable. The provisions of this Agreement, which by their sense and context are reasonably intended to survive the completion, expiration or cancellation of this Agreement, shall survive termination of this Agreement.
17. **Notices.** Notices to the City of Tukwila shall be sent to the following address:

City Clerk  
City of Tukwila  
6200 Southcenter Boulevard  
Tukwila, WA 98188

Notices to Consultant shall be sent to the following address:

KPG Psomas Inc.  
3131 Elliott Avenue, Suite 400  
Seattle, WA 98121
18. **Entire Agreement; Modification.** This Agreement, together with attachments or addenda, represents the entire and integrated Agreement between the City and the Consultant and supersedes all prior negotiations, representations, or agreements written or oral. No amendment or modification of this Agreement shall be of any force or effect unless it is in writing and signed by the parties.

DATED this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

**\*\* City signatures to be obtained by  
City Clerk's Staff ONLY. \*\***

**\*\* Consultant signature to be obtained by  
sponsor staff. \*\***

CITY OF TUKWILA

CONSULTANT:

\_\_\_\_\_  
Allan Ekberg, Mayor

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

Printed Name: \_\_\_\_\_

ATTEST/AUTHENTICATED:

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

\_\_\_\_\_  
Christy O'Flaherty, City Clerk

APPROVED AS TO FORM:

\_\_\_\_\_  
Office of the City Attorney

## EXHIBIT A

### City of Tukwila 2023 Small Drainage Program

City Project Number: xxxxxxxx  
KPG Psomas, Inc. Project Number: xxxxxxxx  
Scope of Work  
April 10, 2023

#### Purpose

The 2023 Small Drainage Program shall consist of Consultant preparing design solution that will repair the scour taking place under Tukwila International Boulevard along the Green River Trail. This design solution will include identifying and working with stakeholders for mitigation that will be completed as a result of the Green River Trail repair.

This scope will also include preparing Plans, Specifications and Estimate for the 2023 Small Drainage Program. The project will include the following site(s):

- 1) Green River Trail Repair (Mitigation Location final design and permitting not included)

#### General Assumptions:

- It is the Consultants understanding that the City will coordinate and secure right of entry and temporary access for any work for property restoration with the property owners on all sites within the project scope. It is assumed this work will be completed during daytime working hours and a noise variance permit will not be required.
- It is the Consultants understanding that the City will coordinate and review any franchise utility submitted right of way use permits, construction permits, and temporary access for any work for utility location and relocation required to install the drainage improvements on all sites within the project scope.
- It is the Consultants understanding that there is no state or federal funding for the Project engineering or construction.

The specific tasks to be performed as part of this scope of work include:

#### **Task 1 Project Management/Coordination/Administration**

1.1 Provide overall project management (assume 10 months) including:

- Project staff management and coordination
- Subconsultant management and coordination
- Prepare and update project schedule
- Schedule and budget monitoring

1.2 Coordinate with City staff and Stakeholders:

- Meeting with City staff to discuss preferred repair design (assume 6 meetings)
- Meeting with Permitting Stakeholders (assume 6 meetings)



- 1.3 Provide QA / QC reviews by senior staff of deliverables prior to submittal to the City. This includes constructability review of subconsultant structural drawings.

Task 1 Deliverables:

- Monthly progress reports and invoicing
- Meeting agendas and minutes including a summary of decisions made / needed resulting from design coordination meetings.

**Task 2 Green River Trail Repair – Civil Design**

- 2.1 Compile and review data and records from the City, including record drawings, GIS data, and relevant previously-prepared reports. Site Visit to compile measurements and create basemap of trail under Tukwila International Blvd.
- 2.2 Prepare 30% design plans and cost estimate for the preferred design repair option. This includes combining the structural plans and quantities.
- 2.3 Prepare 60%, 90%, and final design plans, specifications, and estimate (PS&E) for the preferred design repair options. It is anticipated that the PS&E package will include the following:

PLANS (60%, 90%, Bid)

- Cover sheet (1)
- Legend and abbreviations (1)
- TESC & Site preparation plan (2)
- Trail Repair Plan (includes HMA pavement, fencing, and connections to existing condition) (1)
- Trail Details (1)
- Details - stream restoration (1)
- Pedestrian Trail Traffic Control Plan (2)
- Tukwila International Blvd (TIB) Traffic Control Plan (2)  
(Civil Plans Only. Does NOT include Structural Drawings)

SPECIFICATIONS (90% & Bid)

- a. Bid Documents
- b. Contract Documents
- c. Amendments to the Standard Specifications
- d. Special Provisions
- e. Standard Plans
- f. Prevailing Wage Rates
- g. RCW 19.122

Task 2 Assumptions:

- No Survey will be completed. All drawings based on site visit measurements.
- Civil Design is based on Draft Conceptual trail repair micropile design by Schnabel Engineering (2/10/23) with basis that trail repair is approximately 20 LF in length at concentrated scour location.
- No grant funding (State or Federal)
- WSDOT Standard Specifications and Standard Plans will be referenced on the Plan sheets for all proposed improvements.

- Structural engineering services will be provided by a subconsultant to KPG Psomas. An allowance has been included separate task and budget.

Task 2 Deliverables:

- 30%, 60%, 90% & Final Plans (1/2 size) & estimate, electronic pdf file
- Final Bid Documents and Plans, electronic pdf file and 5 hard copies

**Task 3 Green River Trail Repair – Structural Design Services (see attached)**

**Task 4 Green River Trail Repair - Environmental Services (see attached)**

- 4.1 Consultant shall prepare graphics and figures required for Permit Applications in support for subconsultant permit application preparation. (Assume vicinity map, site map with OHW delineation and project limits, and quantity calculations). Plans prepared in Task 2 and Task 3 will also support these permit applications.

**Management Reserve**

Included in this Contract's Management Reserve includes, but is not limited to:

- Any additional services requested from the City to advance project through final design and construction.

The above activities will require written authorization from City to access management reserve funds.

**Additional Services**

The City may require additional services of the Consultant in order to advance the project through final design and construction. This work may include items identified in the current task authorizations as well other items, which may include, but are not necessarily limited to survey, geotechnical investigation, design, permitting, environmental documentation and/or services during construction.

These services will be authorized under a future contract supplement if necessary. At the time these services are required, the Consultant shall provide a detailed scope of work and an estimate of costs. The Consultant shall not proceed with the work until the City has authorized the work and issued a notice to proceed.



**EXHIBIT B**  
**PRIME CONSULTANT COST COMPUTATIONS**

Client: City of Tukwila  
 Project Name: 2023 Tukwila Small Drainage Program  
 KPG Psomas Inc. Project Number: xxxxxx  
 Date: 4/10/2023

| Task No.   | Task Description  | Labor Hour Estimate |                     |                 |                         |                      |                     |                    |                    |                               |                          |                         |                  |                             | Total Hours and Labor Cost Computations by Task |              |              |                  |           |                  |                  |
|--|---|---------------------|---------------------|-----------------|-------------------------|----------------------|---------------------|--------------------|--------------------|-------------------------------|--------------------------|-------------------------|------------------|-----------------------------|---|--------------|--------------|------------------|-----------|------------------|------------------|
|  |   | Principal           | Engineering Manager | Senior Engineer | Senior Project Engineer | Project Engineer III | Project Engineer II | Project Engineer I | Design Engineer II | Senior Project Manager Survey | Survey Crew II (W/Equip) | Survey Crew I (W/Equip) | Project Surveyor | Senior Construction Manager | Business Manager                                | Senior Admin | Office Admin | Office Assistant | Hours     | Totals           |                  |
|  |   | \$285.00            | \$251.00            | \$215.00        | \$203.00                | \$188.00             | \$175.00            | \$149.00           | \$140.00           | \$251.00                      | \$260.00                 | \$205.00                | \$164.00         | \$245.00                    | \$178.00  | \$133.00     | \$103.00     | \$62.00          |           |                  |                  |
| <b>Task 1 - Project Management/Coordination/Administration</b> |   |                     |                     |                 |                         |                      |                     |                    |                    |                               |                          |                         |                  |                             |   |              |              |                  |           |                  |                  |
| 1.1  | Project Management  | 2                   |                     |                 |                         | 10                   |                     |                    |                    |                               |                          |                         |                  |                             | 5   | 5            |              | 22               | \$        | 3,807.00         |                  |
| 1.2  | Coordination with Staff and Stakeholders                          | 10                  |                     |                 |                         | 18                   |                     |                    |                    |                               |                          |                         |                  |                             |   |              |              | 28               | \$        | 5,660.00         |                  |
| 1.3  | QA/QC Reviews   | 8                   |                     |                 |                         |                      |                     |                    |                    |                               |                          |                         |                  | 6                           |   |              |              | 14               | \$        | 3,478.00         |                  |
|  | <b>Task Total</b>   | <b>0</b>            | <b>20</b>           | <b>0</b>        | <b>0</b>                | <b>28</b>            | <b>0</b>            | <b>0</b>           | <b>0</b>           | <b>0</b>                      | <b>0</b>                 | <b>0</b>                | <b>0</b>         | <b>6</b>                    | <b>5</b>  | <b>0</b>     | <b>0</b>     | <b>64</b>        | <b>\$</b> | <b>12,945.00</b> |                  |
| <b>Task 2 - GRT Repair - Civil Design</b>                      |   |                     |                     |                 |                         |                      |                     |                    |                    |                               |                          |                         |                  |                             |   |              |              |                  |           |                  |                  |
| 2.1  | Review Data and Prepare base map                                  |                     |                     |                 |                         | 4                    |                     |                    | 12                 |                               |                          |                         |                  |                             |   |              |              |                  | 16        | \$               | 2,380.00         |
| 2.2  | 30% Preliminary Plan and Cost Estimate                            |                     |                     |                 |                         | 8                    |                     |                    | 16                 |                               |                          |                         |                  |                             |   |              |              |                  | 24        | \$               | 3,640.00         |
| 2.3  | 60%, 90%, and Bid Document TP&SE                                  |                     |                     |                 |                         | 40                   |                     |                    | 48                 |                               |                          |                         |                  |                             |   |              |              |                  | 88        | \$               | 13,720.00        |
|  | <b>Task Total</b>   | <b>0</b>            | <b>0</b>            | <b>0</b>        | <b>0</b>                | <b>52</b>            | <b>0</b>            | <b>76</b>          | <b>0</b>           | <b>0</b>                      | <b>0</b>                 | <b>0</b>                | <b>0</b>         | <b>0</b>                    | <b>0</b>  | <b>0</b>     | <b>0</b>     | <b>128</b>       | <b>\$</b> | <b>19,740.00</b> |                  |
| <b>Task 3 - GRT Repair - Structural Design Services</b>        |   |                     |                     |                 |                         |                      |                     |                    |                    |                               |                          |                         |                  |                             |   |              |              |                  |           |                  |                  |
| 3.1  | See Below Subconsultants  |                     |                     |                 |                         |                      |                     |                    |                    |                               |                          |                         |                  |                             |   |              |              |                  |           |                  |                  |
|  | <b>Task Total</b>   | <b>0</b>            | <b>0</b>            | <b>0</b>        | <b>0</b>                | <b>0</b>             | <b>0</b>            | <b>0</b>           | <b>0</b>           | <b>0</b>                      | <b>0</b>                 | <b>0</b>                | <b>0</b>         | <b>0</b>                    | <b>0</b>  | <b>0</b>     | <b>0</b>     | <b>0</b>         | <b>\$</b> | <b>-</b>         |                  |
| <b>Task 4 - GRT Repair - Environmental Services</b>            |   |                     |                     |                 |                         |                      |                     |                    |                    |                               |                          |                         |                  |                             |   |              |              |                  |           |                  |                  |
| 4.1  | Graphic and Figure Permit Support<br>See Below Subconsultants Fee |                     |                     |                 |                         | 12                   |                     |                    | 12                 |                               |                          |                         |                  |                             |   |              |              |                  | 24        | \$               | 3,780.00         |
|  | <b>Task Total</b>   | <b>0</b>            | <b>0</b>            | <b>0</b>        | <b>0</b>                | <b>12</b>            | <b>0</b>            | <b>12</b>          | <b>0</b>           | <b>0</b>                      | <b>0</b>                 | <b>0</b>                | <b>0</b>         | <b>0</b>                    | <b>0</b>  | <b>0</b>     | <b>0</b>     | <b>24</b>        | <b>\$</b> | <b>3,780.00</b>  |                  |
|  | <b>Total Labor Hours and Fee</b>                                  | <b>0</b>            | <b>20</b>           | <b>0</b>        | <b>0</b>                | <b>92</b>            | <b>0</b>            | <b>88</b>          | <b>0</b>           | <b>0</b>                      | <b>0</b>                 | <b>0</b>                | <b>0</b>         | <b>6</b>                    | <b>5</b>  | <b>0</b>     | <b>0</b>     | <b>216</b>       | <b>\$</b> | <b>36,465.00</b> |                  |
| <b>Subconsultants</b>  |   |                     |                     |                 |                         |                      |                     |                    |                    |                               |                          |                         |                  |                             |   |              |              |                  |           |                  |                  |
|  | Task 3 - Schrabel   |                     |                     |                 |                         |                      |                     |                    |                    |                               |                          |                         |                  |                             |   |              |              |                  |           | \$               | 18,000.00        |
|  | Task 4 - GeoEngineers   |                     |                     |                 |                         |                      |                     |                    |                    |                               |                          |                         |                  |                             |   |              |              |                  |           | \$               | 37,400.00        |
|  | <b>Subtotal</b>   |                     |                     |                 |                         |                      |                     |                    |                    |                               |                          |                         |                  |                             |   |              |              |                  |           | \$               | 55,400.00        |
|  | Administrative Charge (5%)  |                     |                     |                 |                         |                      |                     |                    |                    |                               |                          |                         |                  |                             |   |              |              |                  |           | \$               | 2,770.00         |
|  | <b>Total Subconsultant Expense</b>                                |                     |                     |                 |                         |                      |                     |                    |                    |                               |                          |                         |                  |                             |   |              |              |                  |           | \$               | <b>58,170.00</b> |
| <b>Reimbursable Direct Non-Salary Costs</b>                    |   |                     |                     |                 |                         |                      |                     |                    |                    |                               |                          |                         |                  |                             |   |              |              |                  |           |                  |                  |
|  | Mileage at current IRS rate                                       |                     |                     |                 |                         |                      |                     |                    |                    |                               |                          |                         |                  |                             |   |              |              |                  |           | \$               | 100.00           |
|  | Reproduction Allowance  |                     |                     |                 |                         |                      |                     |                    |                    |                               |                          |                         |                  |                             |   |              |              |                  |           | \$               | 50.00            |
|  | <b>Total Reimbursable Expense</b>                                 |                     |                     |                 |                         |                      |                     |                    |                    |                               |                          |                         |                  |                             |   |              |              |                  |           | \$               | <b>150.00</b>    |
| <b>Management Reserve</b>                                      |   |                     |                     |                 |                         |                      |                     |                    |                    |                               |                          |                         |                  |                             |   |              |              |                  |           |                  |                  |
|  | Management Reserve  |                     |                     |                 |                         |                      |                     |                    |                    |                               |                          |                         |                  |                             |   |              |              |                  |           | \$               | 5,000.00         |
|  | <b>Total Management Reserve</b>                                   |                     |                     |                 |                         |                      |                     |                    |                    |                               |                          |                         |                  |                             |   |              |              |                  |           | \$               | <b>5,000.00</b>  |
|  | <b>Total Estimated Budget</b>                                     |                     |                     |                 |                         |                      |                     |                    |                    |                               |                          |                         |                  |                             |   |              |              |                  |           | \$               | <b>99,765.00</b> |

**City of Tukwila**

*Green River Trail at Tukwila International Boulevard Bridge Bank Repair*

**GeoEngineers**

**Scope of Work**

**Amendment No. 1**

*February 23, 2023*

**INTRODUCTION AND BACKGROUND**

GeoEngineers, Inc. (GeoEngineers) is pleased to present our scope of services for additional environmental permitting support for the proposed Green River Trail at Tukwila International Boulevard Bridge Bank Repair project in Tukwila, Washington.

Our understanding of the project is based on the following work we completed during the initial phase of the project:

- Teleconference meeting with the City of Tukwila (City), Muckleshoot Indian Tribe (MIT), Washington Department of Fish and Wildlife (WDFW), and KPG Psomas, Inc. (KPG Psomas) to discuss permit processes and mitigation requirements, held on December 5, 2022.
- Teleconference meeting with the City and KPG Psomas to discuss scoping and objectives, held on January 4, 2023.
- A site visit on February 8, 2023, to review site conditions, identify baseline habitat conditions, quantify habitat impact areas by type and identify nearby/adjacent mitigation opportunities.

We understand the City would like us to proceed with documentation of potential habitat impacts that would result from the project and use this as a basis for identifying commensurate mitigation amounts and types that could be used to satisfy permit agency and tribal requirements. The objective of this work is to place bookends on the type and amount of mitigation that would be appropriate to offset the project impacts and to preliminarily identify potential mitigation sites that may meet this objective. This information would be presented to stakeholders and permit agencies for acceptance as a path forward for the project to progress. Following successful acceptance of the approach by stakeholders, we will develop a mitigation commitment memorandum and develop and submit permit applications for the repair of the Green River Trail along the Duwamish River. Based on prior communication with WDFW and MIT, it is acceptable to permit the bank repair using a mitigation commitment, with implementation of the mitigation to follow. Advancement of mitigation site design and implementation of mitigation, including additional permitting, will be developed as a future scope amendment once the site has been selected.

To meet the needs of the City and prevent additional damage to the existing trail infrastructure, it is our goal to obtain necessary permits for the repair portion of the project before the end of 2023. To meet this goal, we propose the following approximate schedule:

- February 2023 – scoping/amendment
- March 2023 – develop impact quantification, mitigation objectives and mitigation alternatives
- April 2023 – present to regulatory agencies and stakeholders
- May 2023 – develop and submit permit applications
- October 2023 – permit receipt and bidding
- November 2023 – construction/bank repair

## **SCOPE OF SERVICES**

### **Task 1 - Mitigation Objectives**

GeoEngineers will complete ecological analyses and develop a brief report summarizing the results of our analyses, including the following:

- Characterize and quantify habitat impacts anticipated to result from the project.
- Use Best Available Science to identify appropriate scale, extent and type of mitigation that would successfully compensate for ecological and habitat impacts resulting from the project.
- Identify mitigation concepts in the project vicinity that may meet the mitigation objectives.
- Quantify and characterize temporal impact of delayed mitigation.
- Review mitigation objectives and concepts with the City for City input.
- Develop a report summarizing the analyses and findings.

### **Task 2 –Stakeholder Coordination**

The purpose of this task is to present the results of Task 1 to regulatory agencies (WDFW, U.S. Army Corps of Engineers [USACE]) and the MIT to obtain stakeholder acceptance and confirm the permit pathway. This will include:

- Schedule and coordinate with each agency as needed to prepare and set up coordination meeting(s).
- Prepare presentation materials.
- Document meeting minutes.

### Task 3 – Mitigation Commitments

The objective of this task is to develop a formal letter committing the City to a specific mitigation project. This work will draw on the results of Tasks 1 and 2, above, and be used in support of permit applications. This will include:

- Summarize and/or append mitigation objectives report.
- Advance mitigation concept for preferred project based on City, regulatory agency and tribal feedback.
- Quantify project impacts and proposed functional offset achieved through implementation of preferred mitigation project.
- Identify mitigation and permitting timeline.

### Task 4 – Permit Applications

It is anticipated the project will need permits from the USACE (Nationwide Permit for Bank Stabilization/Section 404 Clean Water Act and/or Section 10 Rivers and Harbors Act), WDFW (Hydraulic Project Approval [HPA]) and possibly from the municipal planning department (e.g., critical areas permit, shoreline permit, etc.). The scope of work for permit applications includes:

- Develop Joint Aquatic Resources Permit Application (JARPA) form
- Prepare Biological Evaluation for Endangered Species Act (ESA) compliance.
- Submit JARPA, Biological Evaluation and Mitigation Commitments Memo to the USACE in application for Nationwide Permit.
- Develop online HPA permit using WDFW APPS online application system, including associated attachments and additional forms.

### Assumptions and Exclusions

- Habitat survey is not included in this scope.
- Stakeholders will accept the results of our Mitigation Objectives Memo and agree to the strategy/approach previously discussed during the December 5, 2022 meeting, which includes issuance of permits based on the City committing to a mitigation concept, with implementation of the mitigation to follow.
- Mitigation concept will be only minimally advanced as part of this scope of work. Detailed mitigation design and permitting for implementation of the mitigation plan will be addressed in a future scope of work and budget amendment.
- Repair project will be exempt from local critical areas and shoreline permits as a maintenance project. Local permitting is not included at this time.
- Washington State Department of Ecology 401 Water Quality Certification and Coastal Zone Management Consistency Determinations will be programmatically approved as part of the Nationwide Permit.
- KPG Psomas will provide all bank repair design work in support of impact quantification and permitting.

- KPG Psomas will develop permit application drawings.
- A Cultural Resources Survey is not included in this scope of work and assumed that it will not be needed for the repair work.
- Flood permits and associated flood impact modeling will not be needed for the bank repair project.
- This scope does not include consultation with the National Marine Fisheries Service (NMFS) after the initial permit submittal.
- This scope does not include negotiations with the Washington Department of Natural Resources (DNR) for potential aquatic land lease.

**Deliverables:**

- Mitigation Objectives Memorandum
- Summary Documentation from Stakeholder Coordination
- Mitigation Commitments Memorandum
- JARPA Form
- Biological Evaluation
- Complete Permit Application for USACE Permit
- Complete Permit Application for WDFW HPA Permit

**TERMS AND FEE ESTIMATE**

Our services will be completed in accordance with the terms established in our existing contract with KPG Psomas for the project, identified as KPG Psomas Project No. 22003 and dated November 30, 2022.

The estimated fee for the services identified above is outlined in the table below.

| Task No. | Description              | Estimate Fee     |
|----------|--------------------------|------------------|
| 1        | Mitigation Objectives    | \$ 13,800        |
| 2        | Stakeholder Coordination | \$ 3,900         |
| 3        | Mitigation Commitments   | \$ 7,900         |
| 4        | Permit Applications      | \$ 11,800        |
|          | <b>Total</b>             | <b>\$ 37,400</b> |

There are no intended third-party beneficiaries arising from the services described in this proposal and no party other than the party executing this proposal shall have the right to legally rely on the product of our services without prior written permission of GeoEngineers.

October 19th, 2022

Mrs. Kelsey Anderson, PE  
KPG PSOMAS Inc  
3131 Elliot Avenue, Suite 400  
Seattle, WA 98121

**SCHNABEL COMPLETED PRELIMINARY DESIGN TASKS IN 2022 SMALL DRAINAGE PROGRAM CONTRACT BUDGET.**

**THE 2023 SMALL DRAINAGE CONTRACT SHALL INCLUDE SCHNABEL TASK #5 SCOPE WITHIN THIS PDF.**

**Subject: Geotechnical Design Services – Green River Trail Repair under Pacific Highway Bridge, Seattle Washington (Schnabel Reference 22154011.00P)**

Dear Mrs. Anderson:

**SCHNABEL ENGINEERING, LLC** (Schnabel) appreciates the opportunity to submit this proposal for professional engineering services for the referenced project for KPG PSOMAS Inc (KPG). This proposal has been prepared in response to your request on September 28, 2022.

### **PROJECT DESCRIPTION**

This project consists of repairing Green River Trail that has been eroded by the Duwamish River over a trail length of 16-ft. The repair is located under the Pacific Highway Bridge (Tukwila International Blvd) along the south embankment of the Duwamish River. This portion of the existing Green River trail located below the bridge consists of asphalt paving on gravel backfill and is built on backfill retained on the river side by either a sheet pile wall or old timber supported concrete pier 1 pile cap that was left behind during construction of the Pacific Highway Bridge. The portion of the trail that has eroded occurred in the 16-ft gap between the sheet pile wall and old pile cap.

### **OBJECTIVE AND SCOPE OF SERVICES**

The objective of our services is to assist KPG with the development of engineering documents required to successfully repair this section of the Green River Trail. Schnabel's scope of work is to provide both temporary and long-term trail repair solutions. The long-term solution should consist of a system that will support the trail during future high-water level events in accordance with local code.

We propose to furnish the following services in connection with this project.

#### **Task 1 – Site Visits**

We will conduct two site visits to take field measurements and observe the current status of the eroded trail. We will coordinate our activities with KPG and City of Tukwila (City). It is anticipated that each visit shall take no more than 3 hours each. The first visit will occur immediately and will be focused on temporary repairs, while the final site visit will focus on the long-term solution.



## **Task 2 – Conceptual Alternatives Analysis Memo**

We will perform a conceptual alternatives analysis for long-term stabilization for the City's consideration. Schnabel may submit a request for additional information to the City, if need be. The number of alternatives that will be provided for long-term stabilization will be limited to a maximum of 3.

This task includes the following:

- Data review - we will perform a review of existing engineering documents, including the Existing Bridge Plans and Geotechnical Reports.
- Conceptual Alternatives Memo - a memo will be provided to the City summarizing our data review along with a summary of conceptual alternatives for long-term stabilization. Additionally, a summary of the temporary stabilization methods will be included for the City's selection.
- Project Coordination: We will coordinate with KPG and the City as needed and includes attending a meeting either at the City of Tukwila premises or via video conference after the City has reviewed the conceptual alternatives memo.

## **Task 3 – Temporary Stabilization Recommendation Memo**

Once the project team has selected a preferred alternative for long-term stability, Schnabel will compile a brief memo to provide direction to Titan Construction for the selected temporary slope stabilization alternative. This task does not include construction documents.

## **Task 4 – Hydraulic Review and Scour Potential**

Schnabel will review available documents such as FEMA Flood Insurance Studies and available data such as USGS gages. We will use this information in conjunction with the available 1996 Geotechnical Report for the existing Pacific Highway Bridge to evaluate scour potential and develop options for remediation. This may include riprap sizing based on an estimated river velocity.

## **Task 5 – Long-term Stabilization Design**

The long-term stabilization conceptual design alternative selected by the City will ultimately determine the number of hours required to complete the design. The hours provided herein are general and may require refinement after the City selects a conceptual design.

We will provide one electronic calculation submission package consisting of calculations and a drawing set with technical notes signed and sealed by a Professional Engineer registered in the State of Washington.

## **ASSUMPTIONS**

In developing our scope, we have assumed the following:

- Design services will be based on existing geotechnical information as shown on the Existing Bridge Contract Documents. We cannot comment on the accuracy of this data.
- The top of the lateral soil support will match the top of the existing pier 1 pile cap.
- Overtopping of the lateral soil support, by the river and the resulting damage to the trail, is not a design consideration, since the height of the proposed lateral soil support will match the height of the existing pier 1 pile cap.

- This budget considers one round of comment responses from the Owner's Engineer.

### **EXCLUSIONS**

The following services are not included in this proposal:

- Additional design(s) or redesign(s) as a result of updates to the Contract Documents (e.g., a new geotechnical study)
- Hydraulic modeling or sediment transport modeling is not included in the current scope.
- Optimization or redesign based upon site conditions encountered in the field by the Contractor
- Optimization or redesign based on Contractor proposed means and methods.
- Field work and Construction observations
- Professional services not detailed herein

These services may be provided upon request for an additional fee.

### **PROJECT FEES**

Our fees are summarized below and are for the specific scope of services detailed herein. The fee for work requested beyond the scope of services included herein will be based on our current unit prices at the time the work is authorized. Our Schedule of Personnel Fees is included as Attachment 2. The service agreement dated 10/19/2022 will apply to services to be provided under this proposal.

#### **Breakdown of Fees**

| <b>Task</b>                                    | <b>Estimated Fee</b>       |
|--|----------------------------|
| Task 1 – Site Visits                           | \$1,780                    |
| Task 2 – Conceptual Alternatives Analysis Memo | \$5,870                    |
| Task 3 – Temporary Repair Recommendation Memo  | \$2,180                    |
| Task 4 – Hydraulic Review and Scour Potential  | \$4,980                    |
| Task 5 – Long-term Stabilization Design        | \$14,500 – \$18,500        |
| <b>Total Estimated Fee</b>                     | <b>\$29,347 – \$33,810</b> |

**KPG PSOMAS Inc**  
**Green River Trail Repair under Pacific Highway Bridge**

**GENERAL**

We appreciate the opportunity to submit our proposal for these services and look forward to a cordial working relationship for this engagement. Please contact our office if you have any questions regarding this proposal. Your acceptance of this proposal by signing and returning one copy of this letter will form our agreement for these services.

Sincerely,

**SCHNABEL ENGINEERING, LLC**

A handwritten signature in black ink, appearing to read 'M. Pryor', with a long horizontal flourish extending to the right.

Margaret Pryor, PE  
Senior Associate Engineer

BP:MLP;sj

Attachments:

- (1) Cost Estimate with Hours
- (2) Schedule of Personnel Fees
- (3) KPG PSOMAS Inc Subconsultant Professional Services Agreement

**KPG PSOMAS Inc**  
**Green River Trail Repair under Pacific Highway Bridge**

**The terms and conditions of this proposal, including the referenced Contract Terms and Conditions, are:**

**ACCEPTED BY:** \_\_\_\_\_ **KPG PSOMAS Inc.**

**SIGNATURE:** \_\_\_\_\_

**PRINTED NAME:** \_\_\_\_\_

**TITLE:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**GEOSTRUCTURAL ENGINEERING COST ESTIMATE - LABOR**

**PROJECT:** Green River Trail Repair  
**DATE:** 10/14/2022  
**REFERENCE NO.:** 22154011.00P

| DESCRIPTION OF TASK                          | CLASSIFICATION       |                         |                 |                        |                 |                       |                        |                             |                      |               |                  | TOTAL HOURS | TOTAL COST |           |
|--|----------------------|-------------------------|-----------------|------------------------|-----------------|-----------------------|------------------------|-----------------------------|----------------------|---------------|------------------|-------------|------------|-----------|
|  | Expert Witness (Hrs) | Senior Consultant (Hrs) | Principal (Hrs) | Senior Associate (Hrs) | Associate (Hrs) | Senior Engineer (Hrs) | Project Engineer (Hrs) | Senior Staff Engineer (Hrs) | Staff Engineer (Hrs) | Drafter (Hrs) | Technician (Hrs) |             |            |           |
|  | \$460                | \$260                   | \$290           | \$256                  | \$226           | \$200                 | \$173                  | \$149                       | \$126                | \$131         | \$89             |             |            |           |
| <b>Tasks</b>                                 |                      |                         |                 |                        |                 |                       |                        |                             |                      |               |                  |             |            |           |
| Task 1 Site Visits                           |                      |                         | 2               |                        |                 | 6                     |                        |                             |                      |               |                  |             |            | \$ 1,780  |
| Task 2 Conceptual Alternatives Analysis Memo |                      |                         | 3               |                        |                 | 25                    |                        |                             |                      |               |                  |             |            | \$ 5,870  |
| Task 3 Temporary Repair Recommendation Memo  |                      |                         | 2               |                        |                 | 8                     |                        |                             |                      |               |                  |             |            | \$ 2,180  |
| Task 4 Hydraulic Review and Scour Potential  |                      |                         | 2               |                        |                 | 22                    |                        |                             |                      |               |                  |             |            | \$ 4,980  |
| Task 5 Long-term Stabilization Design        |                      |                         | 2               |                        |                 | 9                     |                        |                             |                      |               |                  |             |            | \$ 2,380  |
| <b>Subtotal Hours:</b>                       | 0                    | 0                       | 11              | 0                      | 0               | 70                    | 0                      | 0                           | 0                    | 0             | 0                | 0           | 81         | ****      |
| <b>Subtotal Labor Fee:</b>                   | \$ -                 | \$ -                    | \$ 3,190        | \$ -                   | \$ -            | \$ 14,000             | \$ -                   | \$ -                        | \$ -                 | \$ -          | \$ -             | \$ -        | ****       | \$ 17,190 |
| <b>Percentage</b>                            | 0%                   | 0%                      | 14%             | 0%                     | 0%              | 86%                   | 0%                     | 0%                          | 0%                   | 0%            | 0%               | 0%          |            |           |
| <b>Drawings</b>                              |                      |                         |                 |                        |                 |                       |                        |                             |                      |               |                  |             |            |           |
| Plan and Elevation (1 Sheets)                |                      |                         | 2               |                        |                 | 2                     |                        | 6                           |                      | 6             |                  |             | 16         | \$ 2,660  |
| Details (1 Sheets)                           |                      |                         | 2               |                        |                 | 2                     |                        | 6                           |                      | 6             |                  |             | 16         | \$ 2,660  |
| General Notes (1 Sheet)                      |                      |                         | 2               |                        |                 | 8                     |                        |                             |                      |               | 2                |             | 12         | \$ 2,442  |
| Check and review                             |                      |                         | 4               |                        |                 |                       |                        | 3                           |                      |               |                  |             | 7          | \$ 1,607  |
| Minor Updates to Drawings                    |                      |                         | 2               |                        |                 |                       |                        |                             | 4                    | 4             |                  |             | 10         | \$ 1,608  |
| <b>Subtotal Hours:</b>                       | 0                    | 0                       | 12              | 0                      | 0               | 12                    | 0                      | 15                          | 4                    | 18            | 0                | 0           | 61         | ****      |
| <b>Subtotal Labor Fee:</b>                   | \$ -                 | \$ -                    | \$ 3,480        | \$ -                   | \$ -            | \$ 2,400              | \$ -                   | \$ 2,235                    | \$ 504               | \$ 2,358      | \$ -             | \$ -        | ****       | \$ 10,977 |
| <b>Percentage</b>                            | 0%                   | 0%                      | 20%             | 0%                     | 0%              | 20%                   | 0%                     | 25%                         | 7%                   | 30%           | 0%               | 0%          |            |           |
| <b>City Review</b>                           |                      |                         |                 |                        |                 |                       |                        |                             |                      |               |                  |             |            |           |
| Review - 100% (Respond to 5 Comments)        |                      |                         | 2               |                        |                 | 2                     |                        |                             |                      |               |                  |             | 4          | \$ 980    |
| <b>Subtotal Hours:</b>                       | 0                    | 0                       | 2               | 0                      | 0               | 2                     | 0                      | 0                           | 0                    | 0             | 0                | 0           | 4          | ****      |
| <b>Subtotal Labor Fee:</b>                   | \$ -                 | \$ -                    | \$ 580          | \$ -                   | \$ -            | \$ 400                | \$ -                   | \$ -                        | \$ -                 | \$ -          | \$ -             | \$ -        | ****       | \$ 980    |
| <b>Percentage</b>                            | 0%                   | 0%                      | 2%              | 0%                     | 0%              | 2%                    | 0%                     | 0%                          | 0%                   | 0%            | 0%               | 0%          |            |           |
| <b>Subtotal Hours:</b>                       | 0                    | 0                       | 0               | 0                      | 0               | 0                     | 0                      | 0                           | 0                    | 0             | 0                | 0           | 0          | ****      |
| <b>Subtotal Labor Fee:</b>                   | \$ -                 | \$ -                    | \$ -            | \$ -                   | \$ -            | \$ -                  | \$ -                   | \$ -                        | \$ -                 | \$ -          | \$ -             | \$ -        | ****       | \$ -      |
| <b>Percentage</b>                            | 0%                   | 0%                      | 0%              | 0%                     | 0%              | 0%                    | 0%                     | 0%                          | 0%                   | 0%            | 0%               | 0%          |            |           |
| <b>Total Hours</b>                           | 0                    | 0                       | 25              | 0                      | 0               | 85                    | 0                      | 15                          | 4                    | 18            | 0                | 0           | 147        | ****      |
| <b>Total Labor Fee</b>                       | \$ -                 | \$ -                    | \$ 7,250        | \$ -                   | \$ -            | \$ 17,000             | \$ -                   | \$ 2,235                    | \$ 504               | \$ 2,358      | \$ -             | \$ -        | ****       | \$ 29,347 |
| <b>TOTAL LABOR:</b>                          |                      |                         |                 |                        |                 |                       |                        |                             |                      |               |                  |             |            | \$ 29,347 |



**SCHEDULE OF PERSONNEL FEES – SEATTLE, WASHINGTON**  
**Effective until December 31, 2022**

|                                       |              |
|---------------------------------------|--------------|
| Senior Consultant                     | \$315.00 /hr |
| Principal                             | \$290.00 /hr |
| Senior Associate                      | \$256.00 /hr |
| Associate                             | \$226.00 /hr |
| Senior Engineer/Scientist             | \$200.00 /hr |
| Project Engineer/Scientist            | \$173.00 /hr |
| Senior Staff Engineer/Scientist       | \$149.00 /hr |
| Staff Engineer/Scientist/Technologist | \$126.00 /hr |
| Senior Technician II (see note 3)     | \$122.00 /hr |
| Senior Technician I (see note 3)      | \$102.00 /hr |
| Technician III (see note 3)           | \$89.00 /hr  |
| Technician II (see note 3)            | \$74.00 /hr  |
| Technician I (see note 3)             | \$63.00 /hr  |
| CADD III                              | \$131.00 /hr |
| CADD II                               | \$126.00 /hr |
| CADD I                                | \$103.00 /hr |
| Clerical/Admin                        | \$85.00 /hr  |

**NOTES:**

1. Personnel fees will be based upon the actual hours charged times the appropriate hourly rate.
2. Travel by auto to and from jobs will be charged at the current IRS prevailing rate, plus a markup of 15% to cover handling, insurance and overhead. Travel by air or rail, lodging and meal expense for personnel in the field will be billed at cost plus a 15% markup.
3. Overtime for Technicians is time for work on Saturday, Sunday and national holidays, time in excess of 8 hours per day and time between the hours of 7:00 P.M. and 7:00 A.M. A surcharge of \$25/hr is added to the above rate for overtime.
4. Subcontractors and other non-labor project expenses are marked up 15% to cover the cost of handling, insurance and overhead.