



INFORMATIONAL MEMORANDUM

TO: Transportation and Infrastructure Committee
FROM: Henry Hash, Public Works Director *H. H.*
BY: Mike Perfetti, Habitat Project Manager
CC: Mayor Allan Ekberg
DATE: July 12, 2019
SUBJECT: Surface Water Fund – Storm Water Quality Retrofit Program
Project No. 91241202
Design Consultant Selection and Agreement

ISSUE

Approve a contract with KPG, Inc. to provide project feasibility and design services for the Storm Water Quality Retrofit Project in the amount of \$282,440.

BACKGROUND

The Storm Water Quality Retrofit Project is intended to improve water quality at select City-owned and operated stormwater discharge points at various locations throughout the City. The goal is to reduce the amount of stormwater-generated pollutants that are being discharged to the Green-Duwamish River from City roads in order to improve water quality conditions for endangered salmon species and other fish and wildlife. The design phase of this project entails the evaluation and prioritization of eight stormwater outfalls identified by City staff. Up to four of the sites will be designed to 100%, for which construction funding sources will be sought at a later date.

DISCUSSION

Staff reviewed the current MRSC Consultant Roster and an RFP was sent to several dozen design firms. Three firms submitted proposals; KPG, Inc., TetraTech and PACE Engineering. The proposals were scored according to predefined criteria by a three-person selection committee. KPG was the highest-ranking firm among all three committee members and was invited to interview. KPG has designed the Annual Small Drainage Program since 1991 as well as other surface water projects and Public Works staff continues to be very satisfied with their work.

FINANCIAL IMPACT

The proposed fee for the design work is \$282,440 for the Storm Water Quality Retrofit Project. The 2019 design budget is \$299,000 and a Department of Ecology Stormwater Financial Assistance Program grant will fund \$244,375 on a reimbursable basis.

RECOMMENDATION

Council is being asked to approve a consultant agreement with KPG Inc, in the amount of \$282,440 for project feasibility and design of the Storm Water Quality Retrofit Project and consider this item on the Consent Agenda at the August 5, 2019 Regular Meeting.

ATTACHMENTS

- Proposal Review Summary Sheet
- Page 89, 2019-2024 CIP
- Consultant Agreement

Consultant Proposal Review Committee Scoring and Ranking Form



Tally Sheet

Project	Proposing Firm and Rank				
	KPG	Pace	Tetra Tech		
Stormwater Outfall Water Quality Retrofit Project Proposal Review (100 points max)					
Hari Ponnekanti, City Engineer	1	2	2		
Jeff Heglund, S&SW Maintenance Superintendent	1	2	3		
Mike Perfetti, Habitat PM	1	2	3		
TOTALS (Lowest # is best)	3	6	11		
Cumulative Firm Rank (Lowest # is best)	1	2	3		

CITY OF TUKWILA CAPITAL PROJECT SUMMARY

2019 to 2024

PROJECT: Storm Water Quality Retrofit Program

Project No. 91241202

DESCRIPTION: Provide, design, and install water quality testing and improvements at selected drainage locations.

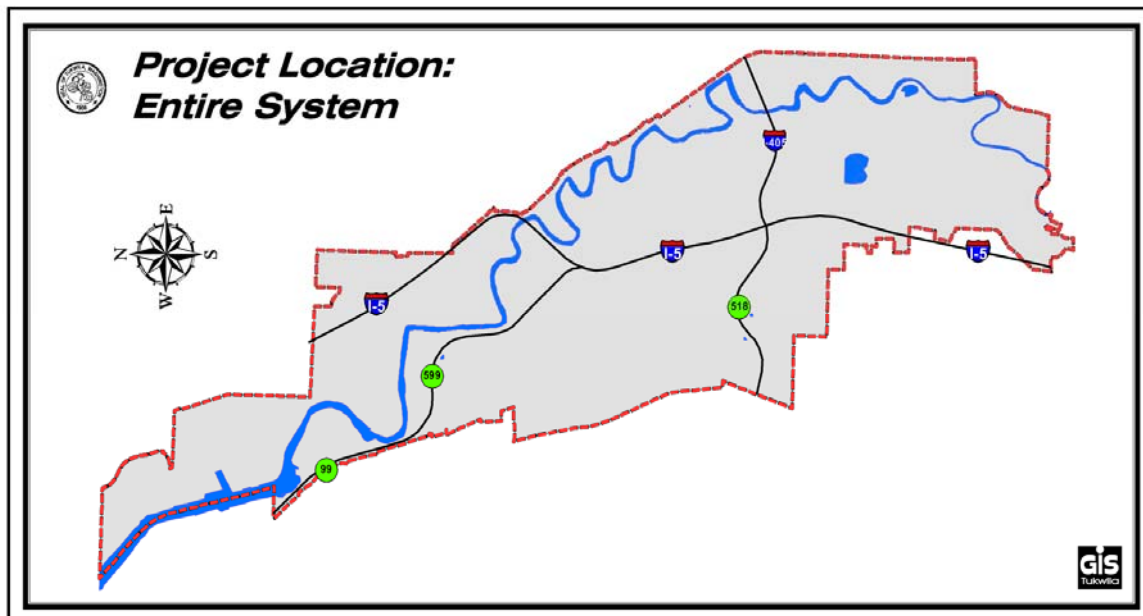
JUSTIFICATION: Most surface water is discharged directly to receiving water bodies untreated.

STATUS: Water quality was added to Interurban Ave S in 2015 and 53rd Ave S in 2018.

MAINT. IMPACT: Expected to increase maintenance.

COMMENT: Combine with other CIP projects for design and construction, where feasible. A 2017 WA State Department of Ecology grant was awarded for \$244,375 with a City match of \$43,125.

FINANCIAL (in \$000's)	Through		Estimated							BEYOND	TOTAL
	2017	2018	2019	2020	2021	2022	2023	2024			
EXPENSES											
Design	1		299	20	20	10	10	15	20	395	
Land (R/W)										0	
Const. Mgmt.			15	15	15	15	15	10	15	100	
Construction			45	80	1,000	40	80	80	80	1,405	
TOTAL EXPENSES	1	0	359	115	1,035	65	105	105	115	1,900	
FUND SOURCES											
Awarded Grant			244							244	
Proposed Grant					850					850	
Mitigation Actual										0	
Mitigation Expected										0	
Utility Revenue	1	0	115	115	185	65	105	105	115	806	
TOTAL SOURCES	1	0	359	115	1,035	65	105	105	115	1,900	





City of Tukwila

6200 Southcenter Boulevard, Tukwila WA 98188

Contract Number:

CONSULTANT AGREEMENT FOR PROJECT FEASIBILITY, DESIGN AND ENGINEERING SERVICES

THIS AGREEMENT is entered into between the City of Tukwila, Washington, hereinafter referred to as "the City", and KPG, 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 project feasibility, design and engineering services in connection with the project titled Stormwater Outfall Water Quality Retrofit 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.** 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 April 30, 2021 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 **\$282,440.00** 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 \$1,000,000 each occurrence, \$2,000,000 general aggregate. Commercial General Liability insurance shall be written on ISO occurrence form CG 00 01 and shall cover liability arising from premises, operations, independent contractors and personal injury and advertising injury. The City shall be named as an insured under the Consultant's Commercial General Liability insurance policy with respect to the work performed for the City.
 3. **Workers' Compensation** coverage as required by the Industrial Insurance laws of the State of Washington.

4. **Professional Liability** with limits no less than \$1,000,000 per claim and \$1,000,000 policy aggregate limit. Professional Liability insurance shall be appropriate to the Consultant's profession.
- B. **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.
- C. **Acceptability of Insurers.** Insurance is to be placed with insurers with a current A.M. Best rating of not less than A:VII.
- D. **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 Consultant before commencement of the work. Certificates of coverage and endorsements as required by this section shall be delivered to the City within fifteen (15) days of execution of this Agreement.
- E. **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.
- F. **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.** The Consultant, 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 or the presence of any disability 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
3131 Elliott Ave 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 OF TUKWILA

CONSULTANT

Allan Ekberg, Mayor

By: *Sessive Asato*

Printed Name: SESSIVE ASATO

Title: SR. PROJECT MANAGER

Attest/Authenticated:

Approved as to Form:

City Clerk, Christy O'Flaherty

Office of the City Attorney

EXHIBIT A
City of Tukwila
Stormwater Outfall
Water Quality Retrofit Project
Scope of Work
June 6, 2019

This project will evaluate and prioritize eight existing outfall locations that discharge untreated stormwater into the Green and Duwamish Rivers, and prepare preliminary and final design for stormwater treatment facilities for the four highest-ranked locations.

The City of Tukwila (“City”) has obtained a grant from the State of Washington Department of Ecology (“Ecology”) to fund this project. Specific requirements of the grant are documented in Agreement No. WQC-2017-Tukwil-00158 (“Grant Agreement”), which has been executed by the City and Ecology.

KPG, P.S. (“KPG”) will support this project by providing professional services as described in the following Scope of Work.

TASK 1 – MANAGEMENT / COORDINATION / ADMINISTRATION

- 1.1 The Consultant will provide continuous project management for the project duration.
- 1.2 The Consultant shall prepare monthly progress reports identifying work in progress, upcoming work elements, and reporting of any delays, problems, or additional information needs. The monthly progress reports shall be submitted with invoices.
- 1.3 The Consultant will prepare for, attend and provide written meeting notes for six in-person design coordination meetings with City staff held at Tukwila City Hall and six conference calls or videoconferences.
- 1.4 The Consultant will provide internal quality assurance/quality control (QA/QC) reviews of all major deliverables prior to submittal to the City.

Task 1 Deliverables:

- *Monthly progress reports*

Task 1 Assumptions:

- *Estimated project duration is 12 months*
- *City will prepare all progress reports and reimbursement requests for Ecology required by Task 1 of the Grant Agreement*

TASK 2 – SITE EVALUATION AND PRIORITIZATION

This task will evaluate and prioritize nine potential storm water quality retrofit sites.

- 2.1 Obtain and review City GIS data, available record drawings, and aerial imagery for the eight potential outfall retrofit sites and upstream tributary areas. This task will seek to:
 - Determine the approximate configuration (horizontal and vertical) of the existing drainage system in the vicinity of the outfall.
 - Compare the elevation of the conveyance system to river water elevations (ordinary high, flood stage).
 - Determine if elevational drop exists within the drainage system upstream of the outfall.
 - Estimate the size and characterize land use of the upstream drainage basin.
 - Identify potential right-of-way constraints and utility conflicts.
 - Identify additional information needed to complete the evaluation of each site.
- 2.2 Perform one site visit to each potential retrofit location to observe site conditions and obtain additional information not available from record sources. Limited field survey of storm drainage conveyance systems will be performed if required to identify rim and invert elevations not available in GIS data.
- 2.3 Prepare conceptual retrofit design for each site. Create GIS and/or record drawing-based maps for each potential retrofit site showing contributing tributary areas and potential water quality retrofit system configurations.
- 2.4 Prepare planning-level cost estimates for each potential retrofit site/alternative.
- 2.5 Perform retrofit site/alternative evaluation and document findings in an evaluation matrix. Evaluation criteria to include pollution reduction (treatment area and land use), construction cost, maintenance cost, permitting requirements, and other criteria to be discussed with the City. Utilize numerical criteria ratings and weighting factors to develop a draft prioritization list. Subconsultants GeoDesign (geotechnical) and Parametrix (permitting) will provide input to this subtask.
- 2.6 Revise and finalize site/alternative figures and evaluation matrix based on input from the City.

Task 2 Deliverables:

- *Site/alternative retrofit figures/maps (draft and final - PDF)*
- *Site/alternative evaluation matrix (draft and final - PDF)*
- *Permit matrix (PDF)*

Task 2 Assumptions:

- *City will provide current GIS data (shapefiles) consisting of storm drainage pipes, structures, open channels, and elevation contours, buildings, and pavement edges (as available).*
- *City will provide available record drawings for existing public and private improvements in vicinity of outfall retrofit site locations.*
- *Alternative water quality retrofit concepts will be developed to an approximate 10% level of design.*
- *Retrofits utilizing pump stations will not be considered.*

TASK 3 – SURVEY AND BASE MAPPING

This task will provide topographic survey and base map preparation for four retrofit site locations. This task will also include the work necessary to establish the existing right of way (ROW) and parcel lines using King County recorded documents.

- 3.1 Establish horizontal and vertical control points along the corridor for field topographic survey. Basis of control will be: Horizontal NAVD 83/2011, Vertical NAVD 88. Control points will be established and will be made available for use during design/construction. The consultant will locate, field survey, and calculate positions for monuments and control points throughout the project limits, using the Washington State Plane coordinate system. Conventional or GPS surveying methods will be used on this project.
- 3.2 The Consultant will perform field survey of planimetric features and utilities. Consultant shall subcontract with a utility locating company to paint all underground utility locations within survey area prior to performing field surveys. Topographic mapping of the existing ground will be taken at approximately at 25-foot intervals (to provide 2-foot contour intervals). Irrigation systems will not be included. Perform observation and measure-downs of existing storm drain catch basins and manholes and sewer manholes. The approximate size, type (brick, concrete), and general condition of the structures to confirm suitability for continued use, and approximate size and location of pipes will be documented. These observations will be made from the surface.
- 3.3 The Consultant will perform CADD mapping work to prepare 1"=20' topographic base map and digital terrain model (DTM) in AutoCAD 2018 format of the project within the project area.
- 3.4 The locations of utility potholes will be surveyed and added to the base map.
- 3.5 The Consultant shall calculate right of way and parcel lines within the project area to be shown on the base map.

Task 3 Deliverables:

- *Electronic Base Map showing utility locations, surface features, contours, and existing right-of-way.*

Task 3 Assumptions:

- *The level of effort Task 3 has been developed prior to selection of the retrofit locations and configurations. Selection of retrofit alternatives with a size and complexity greater than assumed may require modification to the scope of work and budget.*
- *Base map will be prepared in AutoCAD Civil 3D 2018 using KPG drafting standards*
- *Right-of-way plans, legal descriptions, or acquisition will not be required.*
- *Potholing, if required, will be provided by private utility owners.*

TASK 4 – GEOTECHNICAL

- 4.1 Geotechnical services will be performed to support design and construction of the new water quality retrofit facilities. The purpose of these services will be to explore subsurface conditions at the proposed locations of the improvements and provide geotechnical services to support

design of the planned improvements. This work will be performed by subconsultant GeoDesign, Inc. The specific scope of services will include:

- Plan and conduct a geotechnical field investigation at up to four site locations. Each site location will include up to two soil borings to a depth of up to 20 feet below ground surface (BGS) (up to eight borings total) and installation of a standpipe piezometer at up to two site locations. The wells will be installed within one of the borings.
- Obtain right-of-way (ROW) permits.
- Complete a site visit to mark the subsurface exploration locations for utility locates.
- Provide traffic control during the subsurface explorations.
- Explore subsurface conditions at up to four site locations by completing up to two hollow-stem auger borings to a depth of up to 20 feet BGS. Install a standpipe piezometer at up to two site locations to monitor groundwater levels.
 - A site plan of proposed boring locations will be provided to KPG and the City for review prior to starting field explorations.
 - All borings will be patched with EZ Street brand polymer-modified patch compound. An HS-20 rated, steel, flush-mount monument will be installed at the well locations.
- Maintain a detailed log of the explorations and collect samples of the pavement, base, and subgrade materials encountered.
- Collect soil samples at select depths in the explorations and complete laboratory testing on select samples. Up to eight moisture content determinations and four percent fines content determinations will be completed.

Task 4 Deliverables:

- *Geotechnical Report (draft and final - PDF)*

Task 4 Assumptions:

- *Borings will be located within the public ROW and that the City will waive any permit fees associated with obtaining the permits to complete our field work.*

TASK 5 – PERMITTING

5.1 Executive Order (EO) 05-05 requires all state agencies with capital improvement projects to consult with the Department of Archaeology and Historic Preservation (DAHP) and concerned tribes. Complying with EO 05-05 will involve completing the following tasks:

- Identification of the project's area of potential impacts (API). The API shall be mapped and include all areas proposed for ground disturbance, including staging areas.
- Preparation of Ecology's EO 05-05/Section 106 NHPA Project Review Form.
- Preparation of an Inadvertent Discovery Plan (IDP) utilizing Ecology's standard IDP form.

An allowance has been included for preparation of a cultural resources assessment by subconsultant Cultural Resource Consultants, if required as a result of agency/tribal consultation.

5.2 The Consultant shall prepare SEPA documentation consisting of a draft Environmental Checklist for finalization by the City. This subtask will be performed by subconsultant Parametrix.

- 5.3 The Consultant shall prepare an application form for a Shoreline Substantial Development Permit for the project improvements. A written discussion of project consistency with the Review Guidelines will be included. This subtask will be performed by subconsultant Parametrix.

Task 5 Deliverables:

- *EO 05-05 Project Review Form (draft & final – PDF).*
- *Inadvertent Discovery Plan (draft & final – PDF).*
- *Draft SEPA Checklist & ESA Screening Checklist (PDF).*
- *Shoreline Substantial Development Permit application (PDF).*

Task 5 Assumptions:

- *EO 05-05 Project Review Form and IDP will be submitted to Ecology by City.*
- *Fees, signage, and public notice of SEPA will be by the City.*
- *No sensitive areas special studies will be required.*
- *No water resources permits (WDFW Hydraulic Project Approval, Corps of Engineers 404/10 Permit, Ecology 401 Water Quality Certification) will be required.*

TASK 6 – PRELIMINARY AND FINAL DESIGN

The Consultant shall prepare preliminary design and final plans, specifications and cost estimate for review and approval by the City and Ecology. Plans shall be formatted to provide sufficient detail for convenient field layout of all proposed facilities and City standard details and WSDOT standard plans will be supplemented with project specific details as required. This task shall also include preparation of items required for the Design Report and 90% Design Package submittals to Ecology, contents of which shall be prepared in accordance with the Ecology publication “Design Deliverables for Stormwater Projects with Ecology Funding”, dated June 2018.

- 6.1 The Consultant shall perform preliminary design of facilities at the four selected retrofit locations and prepare 30% drawings. In general, these plans will convey the proposed horizontal locations of improvements but will not include construction notes, specific construction details; however preliminary storm drainage profiles will be provided. If required based on the results of the topographic survey, additional alternative retrofit configurations will be analyzed at a 10% level of design to supplement the alternatives analysis performed for site evaluation and prioritization (Task 2), prior to completing the 30% drawings.
- 6.2 The Consultant shall prepare a Design Report to document the design as specified in the Ecology publication “Design Deliverables for Stormwater Projects with Ecology Funding”, dated June 2018.
- 6.3 The Consultant shall respond to Ecology comments on Design Report submittal, and prepare a revised Design Report if required.
- 6.4 The Consultant shall coordinate with City and franchise utility companies impacted by the project improvements. This effort will include sending letters to all utility providers serving the project site areas to confirm utility locations, identify planned upgrades, identify potential conflicts, and develop plans for resolving conflicts.

- 6.5 Following Ecology acceptance of the Design Report, the Consultant shall prepare 90% design drawings for the project. The 90% submittal will include responses to all comments received from the 30% review by the City. Following an initial review by the City, the same 90% design plans will be submitted to Ecology as part of the 90% Design Package specified by the grant agreement.
- 6.6 The Consultant shall respond to Ecology comments on 90% Design Package, and if required prepare a revised 90% Design Package for submittal to Ecology.
- 6.7 Following Ecology acceptance of the 90% Design Package, the Consultant shall prepare 100% design drawings for the project for submittal to the City. The 100% submittal will include responses to all comments received from the 90% review by the City.
- 6.8 The Consultant will calculate quantities and prepare construction cost opinions in support of the 30%, 90% and 100% Plans.
- 6.9 The Consultant will prepare specifications for review and approval by the City at the 90% and 100%. Specifications will be based on 2018 WSDOT Standard Specifications, using contract boilerplate and general special provisions provided by the City.

Task 6 Deliverables:

- 30% Plans and Cost Estimate (PDF)
- Design Report (draft and final - PDF)
- Design Report resubmittal (if required by Ecology - PDF)
- 90% Plans, Cost Estimate and Specifications (PDF)
- 90% Package resubmittal (if required by Ecology - PDF)
- Responses to City Comments (30%, Design Report, 90% - PDF)
- Responses to Ecology Comments (Design Report, 90% - PDF)
- 100% Plans, Cost Estimate and Specifications (PDF)

Task 6 Assumptions:

- The level of effort for final design of four selected retrofit sites has been developed prior to selection of the retrofit locations and configurations. Selection of retrofit alternatives with a size and complexity greater than assumed may require modification to the scope of work, potentially reducing the number of sites to be taken to final design and/or elimination of the 100% design subtask.
- 30% Plans content:
 - 1 Cover Sheet
 - 1 Legend and Abbreviations
 - 6 Site Preparation and TESC Plans
 - 6 Storm Drainage Plans
 - 4 Storm Drainage Profiles
 - Total: 18 Sheets
- 90% & 100% Plans content:
 - 1 Cover Sheet
 - 1 Legend and Abbreviations
 - 6 Site Preparation and TESC Plans
 - 1 TESC Notes and Details

6 *Storm Drainage Plans*
4 *Storm Drainage Profiles*
6 *Storm Drainage Details*
4 *Landscape Plans and Details*
Total: 29 Sheets

Additional Services

The City may require additional services of the Consultant in order to advance the project corridor through final design, bidding and/or 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 the following:

- Public outreach support
- Water resources permits
- Right of way and easement research and/or acquisition
- Providing bid documents and bid period assistance
- Providing construction phase support
- Preparation of Record Drawings

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: Stormwater Outfall Water Quality Retrofits
 KPG PROJECT NUMBER: 19057
 DATE: June 2019

Task No.	Task Description	Labor Hour Estimate														Total Hours and Labor Fee Estimate by Task		
		Principal	Engineering Mgr	Sr. Engineer	Construction Mgr	Sr. Transp. Planner	Project Engineer	Senior Const Observer	Resident Engineer	Architecture Technician II	Documentation Specialist	Engineering Technician	Survey Crew I	Survey Crew II	Office Admin	Engineering Assistant	Hours	Fee
			Sr. Const Mgr	Aviation Mgr	Urban Design Mgr	Architect II	Project Surveyor	Project Land. Arch.	Construction Office Engr	Design Engineer	Sr. Admin	Architecture Technician I			Construction Observer I	Survey Assistant		
		232	210	184	166	150	140	128	125	117	115	100	166	216	92	77		
Task 1 - Management/Coordination/Administration																		
1.1	Project management and administrative services	2		12													26	\$ 4,052.00
1.2	Progress reports		12								12						12	\$ 2,208.00
1.3	City staff coordination meetings & conference calls		24	18	18												60	\$ 9,924.00
1.4	QA/QC reviews	12	24														36	\$ 7,200.00
	Task Total	14	0	72	18	0	18	0	0	0	12	0	0	0	0	0	134	\$ 23,384.00
Task 2 - Site Evaluation and Prioritization																		
2.1	Obtain and review GIS data and record drawings			4	8												28	\$ 4,304.00
2.2	Perform site reconnaissance and invert elevation survey			8	12							16					64	\$ 9,856.00
2.3	Prepare conceptual retrofit designs	1	4	20	20												53	\$ 8,024.00
2.4	Prepare planning-level cost estimates		1	2	2												11	\$ 1,636.00
2.5	Perform draft retrofit site/alternative evaluation	2	2	4	4												24	\$ 3,736.00
2.6	Perform final retrofit site/alternative evaluation	1	2	2	4												15	\$ 2,384.00
	Task Total	4	0	21	50	0	88	0	0	16	0	16	0	0	0	0	195	\$ 29,940.00
Task 3 - Survey and Base Mapping																		
3.1	Establish horizontal and vertical control		2														10	\$ 2,148.00
3.2	Perform field survey		4									40					84	\$ 16,120.00
3.3	Perform CADD mapping		2							88							90	\$ 10,716.00
3.4	Survey potholes									4		12					16	\$ 2,460.00
3.5	ROW research and calculations						20										20	\$ 2,800.00
	Task Total	0	8	0	0	0	20	0	0	92	0	52	48	0	0	0	220	\$ 34,244.00
Task 4 - Geotechnical Report																		
4.1	Geotechnical exploration and report for 4 sites			4			4										8	\$ 1,296.00
	Task Total	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	8	\$ 1,296.00
Task 5 - Permitting																		
5.1	Cultural resources: API, 05-05 form, IDP			2													14	\$ 2,048.00
5.2	SEPA documentation		2														4	\$ 648.00
5.3	Shoreline permit application		1														3	\$ 464.00
	Task Total	0	0	5	0	0	16	0	0	0	0	0	0	0	0	0	21	\$ 3,160.00
Task 6 - Preliminary and Final Design																		
6.1	Prepare 30% design drawings	2		16	24		40										162	\$ 21,672.00
6.2	Prepare Design Report		16		40												96	\$ 14,264.00
6.3	Respond to Ecology comments on Design Report		4		8												20	\$ 3,000.00
6.4	Utility coordination		2		8		8										18	\$ 2,816.00
6.5	Prepare 90% design drawings	4	32	80	80		100	24									400	\$ 55,080.00
6.6	Respond to Ecology comments on 90% Design Package		4		8		8										20	\$ 3,184.00
6.7	Prepare 100% design drawings	2	8		12		36										98	\$ 13,312.00
6.8	Prepare construction cost estimates (30%, 90%, 100%)	2	8		16		24	8									58	\$ 8,976.00
6.9	Prepare specifications (90%, 100%)	2	12		16		24	8									62	\$ 9,712.00
	Task Total	12	0	102	212	0	240	40	0	232	0	72	0	24	0	0	934	\$ 132,016.00

Total Labor Hours and Fee	30	8	204	280	0	386	40	0	340	12	72	68	48	24	0	1,512	\$ 224,040.00	
Subconsultants																		
																		Utility Locate Service \$ 5,000.00
																		Geotechnical - GeoDesign Inc. \$ 26,700.00
																		Permitting - Parametrix (Site Evaluation, SEPA & Shorelines) \$ 21,700.00
																		Cultural resources survey/assessment (if required) - Cultural Resource Consultants \$ 5,000.00
																		Subtotal \$ 57,800.00
																		Administrative Charge (0%) \$ -
																		Total Subconsultant Expense \$ 57,800.00
Reimbursable Direct Non-Salary Costs																		
																		Mileage at current IRS rate \$ 600.00
																		Reproduction Allowance \$ -
																		Total Reimbursable Expense \$ 600.00
																		Total Estimated Budget \$ 282,440.00