

INFORMATIONAL MEMORANDUM

TO: Transportation and Infrastructure Committee

FROM: Henry Hash, Public Works Director

BY: Steve Carstens, Senior Program Manager

CC: Mayor Ekberg

DATE: **November 21, 2018**

SUBJECT: Boeing Access Road Bridge over Airport Way Seismic Retrofit

Project No. 91310407

Design Consultant Selection and Agreement

ISSUE

Execute an agreement with TranTech Engineering, LLC (TranTech) for design engineering services for the Boeing Access Road Bridge over Airport Way Seismic Retrofit Project.

BACKGROUND

Boeing Access Road (BAR) is a principal arterial connecting I-5 and East Marginal Way South. It is considered regionally significant and is included on the National Highway System (NHS) for access to the Boeing Company and the King County Airport at Boeing Field. The BAR Bridge over Airport Way is the only remaining structure on the BAR corridor that has not been seismically upgraded. This improvement would allow the entire corridor to be seismically resistant during a seismic event.

DISCUSSION

Request for Qualifications were published on August 8 and 22, 2018 and six firms submitted on September 23, 2018. Three firms were then interviewed and TranTech was the highest rated firm from the selection process. Staff then negotiated the fees for the design phase of the project.

FINANCIAL IMPACT

The Transportation and Infrastructure Committee approved/accepted the Federal BRAC bridge grant, in the amount of \$2,981,055, on January 19, 2018. The design phase of the grant is for \$367,200 and has a 13.5% local match or \$47,520.00. The federal funding letter states that the Boeing Access Road Bridge over Airport Way Seismic Retrofit Project requires a 13.5% local match, but if construction is authorized by December 2020, the project is eligible for 100% federal funding. We see no impediment to successfully completing the project by 2020 and receive the 100% construction funding, up to the allowable \$3 million.

 Contract
 Budget

 Design Contract
 \$315,112.00
 \$367,000.00

RECOMMENDATION

Council is being asked to approve the design consultant contract with TranTech Engineering, LLC, in the amount of \$315,112.00 for the Boeing Access Road Bridge over Airport Way Seismic Retrofit Project and consider this item on the Consent Agenda at the December 3, 2018 Regular Meeting.

Attachments: Selection Matrix

BRAC Funding Award Letter Proposed 2019, pg. 13 Consultant Agreement

S BAR over Airport Way - Summary Sheet

Firm	Cumulative Score	Avg Score	Rank
Jacobs Engineering Group, LLC	198	66.00	2
TranTech Engineering, LLC	232	77.33	1
David Evans and Associates, Inc.	190	63.33	5
Berger ABAM	195	65.00	4
KPFF, Inc	196	65.33	3
RHC Engineering	171	57.00	6
Individual scores will not be released.			

Top 3 firms move onto the interview.

S BAR over Airport Way - Summary Sheet

Firm	Cumulative Score	Avg Score	Rank
Jacobs (8-9AM)	285	71.25	3
KPFF (930-1030PM)	302	75.5	2
Trantech (11AM-12PM)	318	79.5	1



Transportation Building 310 Maple Park Avenue S.E. P.O. Box 47300 Olympia, WA 98504-7300 360-705-7000 TTY: 1-800-833-6388 www.wsdot.wa.gov

December 6, 2017

Mr. Robin Tischmak Interim Public Works Director City of Tukwila 6300 Southcenter Blvd., Suite 100 Tukwila, Washington 98188-2545

RECEIVED

DEC 1 1 2017

S Bar/Airport Way 2017 Local Bridge Program Federal Funding

TUKWILA PUBLIC WORKS

Dear Mr. Tischmak:

WSDOT is pleased to advise you that the above mentioned bridge project was recently selected. The federal funding is limited to the amount shown below:

S Bar/Airport Way

\$2,981,055

Scope: Seismic

NOTE: This project requires 13.5 percent local match. If construction is authorized by December 2020, the project is eligible for 100 percent federal funding for eligible costs. Preventative maintenance projects are limited to a maximum \$3 million.

In order to meet state and federal requirements, the following are required:

- Project expenditures incurred before receiving notice from Local Programs of federal fund authorization are not eligible for reimbursement.
- Please refer to the Local Programs webpage for detailed information, including: (http://www.wsdot.wa.gov/localprograms/)
 - ✓ Local Agency Guidelines (LAG) manual for the requirements regarding programming, authorization, reimbursement, etc.;
 - ✓ Projects utilizing federal funds must be included in your current Transportation Improvement Program (TIP) as a complete programmed project. Once your TIP amendment is approved, WSDOT will amend the Statewide Transportation Improvement Program (STIP):
 - ✓ Funding and billing forms;
 - ✓ Quarterly Project Reporting is required to be completed by the end of March, June, September, and December each year. To access the database you will need an account name and password. Your account name is **Tukwila** and your password is **Tukwi785**. The password is case sensitive.

As a reminder, Local Programs requires all agencies to submit monthly progress billings to ensure timely reimbursement of eligible federal expenditures.

For assistance please contact Mehrdad Moini, your Region Local Programs Engineer, at 206.440.4734.

Sincerely.

Kathleen B. Davis

Director

Local Programs

KBD:st:sas

cc: Kelly McGourty, Transportation Director, PSRC

Mehrdad Moini, Northwest Region Local Programs Engineer, MS NB82-121

CITY OF TUKWILA CAPITAL PROJECT SUMMARY

2019 to 2024

PROJECT: Boeing Access Rd over Airport Way Seismic Retrofit

Project No. 91310407

DESCRIPTION:

Provide seismic modifications to the Boeing Access Road over Airport Way Bridge to allow it to withstand

earthquake forces.

JUSTIFICATION:

The Boeing Access Road over Airport Way Bridge is the final bridge on the corridor from I-5 to the King County Airport and Boeing facilities that has not been seismically upgraded. This improvement would

allow the entire corridor to be seismically resistant during an earthquake.

STATUS:

New Project for 2019 - 2024 CIP. Design is scheduled to begin in the second quarter of 2018 with

construction in 2020.

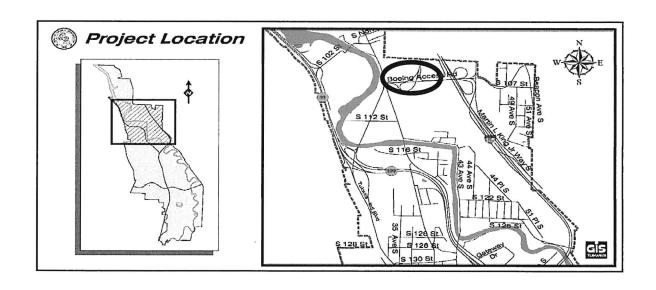
MAINT. IMPACT:

Maintenance should remain the same after the seismic items are installed.

COMMENT:

Design requires a 13.5% match. If construction is not authorized by December 2020, the City would be required to provide a 13.5% match. If construction is authorized prior to that date, there would be no City match. We believe that the project can obtain the construction authorization so no City funding is listed below.

FINANCIAL	Through	Estimated							(4)	
(in \$000's)	2017	2018	2019	2020	2021	2022	2023	2024	BEYOND	TOTAL
EXPENSES										
Design		100	267							367
Land (R/W)										0
Const. Mgmt.				520						520
Construction				2,094						2,094
TOTAL EXPENSES	0	100	267	2,614	0	0	0	0	0	2,981
FUND SOURCES										
Awarded BRAC Gran	t	87	231	2,614						2,932
Proposed Grant										0
Fund Balance-Bond										0
Mitigation										0
City Oper. Revenue	0	13	36	0	0	0	0	0	0	49
TOTAL SOURCES	0	100	267	2,614	0	0	0	0	0	2,981



Local Agency A&E Professional Services Cost Plus Fixed Fee Consultant Agreement

Agreement Number:

Firm/Organization Legal Name (do not use dba's):	
Address	Federal Aid Number
UBI Number	Federal TIN or SSN Number
Execution Date	Completion Date
1099 Form Required	Federal Participation
Yes No	Yes No
Project Title	
Description of Work	
☐ Yes ☐ No DBE Participation ☐ Yes ☐ No MBE Participation ☐ Yes ☐ No WBE Participation	Total Amount Authorized: Management Reserve Fund:
Yes No SBE Participation	Maximum Amount Payable:

Index of Exhibits

Exhibit A	Scope of Work
Exhibit B	DBE Participation/SBE Plan
Exhibit C	Preparation and Delivery of Electronic Engineering and Other Data
Exhibit D	Prime Consultant Cost Computations
Exhibit E	Sub-consultant Cost Computations
Exhibit F	Title VI Assurances
Exhibit G	Certification Documents
Exhibit H	Liability Insurance Increase
Exhibit I	Alleged Consultant Design Error Procedures
Exhibit J	Consultant Claim Procedures

THIS AGREEMENT, made and entered into as shown in the "Execution Date" box on page one (1) of this AGREEMENT, between the

hereinafter called the "AGENCY," and the "Firm / Organization Name" referenced on page one (1) of this AGREEMENT, hereinafter called the "CONSULTANT."

WHEREAS, the AGENCY desires to accomplish the work referenced in "Description of Work" on page one (1) of this AGREEMENT and hereafter called the "SERVICES;" and does not have sufficient staff to meet the required commitment and therefore deems it advisable and desirable to engage the assistance of a CONSULTANT to provide the necessary SERVICES; and

WHEREAS, the CONSULTANT represents that they comply with the Washington State Statutes relating to professional registration, if applicable, and has signified a willingness to furnish consulting services to the AGENCY.

NOW, THEREFORE, in consideration of the terms, conditions, covenants, and performance contained herein, or attached and incorporated and made a part hereof, the parties hereto agree as follows:

I. General Description of Work

The work under this AGREEMENT shall consist of the above-described SERVICES as herein defined, and necessary to accomplish the completed work for this project. The CONSULTANT shall furnish all services, labor, and related equipment and, if applicable, sub-consultants and subcontractors necessary to conduct and complete the SERVICES as designated elsewhere in this AGREEMENT.

II. General Scope of Work

The Scope of Work and projected level of effort required for these SERVICES is described in Exhibit "A" attached hereto and by this reference made a part of this AGREEMENT. The General Scope of Work was developed utilizing performance based contracting methodologies.

III. General Requirements

All aspects of coordination of the work of this AGREEMENT with outside agencies, groups, or individuals shall receive advance approval by the AGENCY. Necessary contacts and meetings with agencies, groups, and/or individuals shall be coordinated through the AGENCY. The CONSULTANT shall attend coordination, progress, and presentation meetings with the AGENCY and/or such State, Federal, Community, City, or County officials, groups or individuals as may be requested by the AGENCY. The AGENCY will provide the CONSULTANT sufficient notice prior to meetings requiring CONSULTANT participation. The minimum required hours or days' notice shall be agreed to between the AGENCY and the CONSULTANT and shown in Exhibit "A."

The CONSULTANT shall prepare a monthly progress report, in a form approved by the AGENCY, which will outline in written and graphical form the various phases and the order of performance of the SERVICES in sufficient detail so that the progress of the SERVICES can easily be evaluated.

The CONSULTANT, any sub-consultants, and the AGENCY shall comply with all Federal, State, and local laws, rules, codes, regulations, and all AGENCY policies and directives, applicable to the work to be performed under this AGREEMENT. This AGREEMENT shall be interpreted and construed in accordance with the laws of the State of Washington.

Participation for Disadvantaged Business Enterprises (DBE) or Small Business Enterprises (SBE), if required, per 49 CFR Part 26, shall be shown on the heading of this AGREEMENT. If DBE firms are utilized at the commencement of this AGREEMENT, the amounts authorized to each firm and their certification number will be shown on Exhibit "B" attached hereto and by this reference made part of this AGREEMENT. If the Prime CONSULTANT is a DBE certified firm they must comply with the Commercial Useful Function (CUF) regulation outlined in the AGENCY's "DBE Program Participation Plan" and perform a minimum of 30% of the total amount of this AGREEMENT. It is recommended, but not required, that non-DBE Prime CONSULTANTS perform a minimum of 30% of the total amount of this AGREEMENT.

In the absents of a mandatory UDBE, a voluntary SBE goal amount of ten percent of the Consultant Agreement is established. The Consultant shall submit a SBE Participation Plan prior to commencing work. Although the goal is voluntary, the outreach efforts to provide SBE maximum practicable opportunities are not.

The CONSULTANT, on a monthly basis, shall enter the amounts paid to all firms involved with this AGREEMENT into the <u>wsdot.diversitycompliance.com program</u>. Payment information shall identify any DBE Participation. Non-minority, woman owned DBEs does not count towards UDBE goal attainment.

All Reports, PS&E materials, and other data furnished to the CONSULTANT by the AGENCY shall be returned. All electronic files, prepared by the CONSULTANT, must meet the requirements as outlined in Exhibit "C – Preparation and Delivery of Electronic Engineering and other Data."

All designs, drawings, specifications, documents, and other work products, including all electronic files, prepared by the CONSULTANT prior to completion or termination of this AGREEMENT are instruments of service for these SERVICES, and are the property of the AGENCY. Reuse by the AGENCY or by others, acting through or on behalf of the AGENCY of any such instruments of service, not occurring as a part of this SERVICE, shall be without liability or legal exposure to the CONSULTANT.

Any and all notices or requests required under this AGREEMENT shall be made in writing and sent to the other party by (i) certified mail, return receipt requested, or (ii) by email or facsimile, to the address set forth below:

Name: Name: Agency: Agency: Address: Address:

City: State: Zip: City: State: Zip:

Email:
Phone:
Facsimile:

Email:
Phone:
Facsimile:

Email:
Phone:
Facsimile:

IV. Time for Beginning and Completion

The CONSULTANT shall not begin any work under the terms of this AGREEMENT until authorized in writing by the AGENCY. All work under this AGREEMENT shall be completed by the date shown in the heading of this AGREEMENT titled "Completion Date."

The established completion time shall not be extended because of any delays attributable to the CONSULTANT, but may be extended by the AGENCY in the event of a delay attributable to the AGENCY, or because of unavoidable delays caused by an act of GOD, governmental actions, or other conditions beyond the control of the CONSULTANT. A prior supplemental AGREEMENT issued by the AGENCY is required to extend the established completion time.

V. Payment Provisions

The CONSULTANT shall be paid by the AGENCY for completed SERVICES rendered under this AGREEMENT as provided hereinafter. Such payment shall be full compensation for SERVICES performed or SERVICES rendered and for all labor, materials, supplies, equipment, and incidentals necessary to complete SERVICES, specified in Section II, "Scope of Work". The CONSULTANT shall conform to all applicable portions of 48 CFR Part 31 (www.ecfr.gov). The estimate in support of the Cost Plus Fixed Fee amount is attached hereto as Exhibits "D" and "E" and by this reference made part of this AGREEMENT.

- A. Actual Costs: Payment for all consulting services for this PROJECT shall be on the basis of the CONSULTANT'S actual cost plus a fixed fee. The actual cost shall include direct salary cost, indirect cost rate, and direct non-salary costs.
 - 1. Direct (RAW) Labor Costs: The Direct (RAW) Labor Cost is the direct salary paid to principals, professional, technical, and clerical personnel for the time they are productively engaged in work necessary to fulfill the terms of this AGREEMENT. The CONSULTANT shall maintain support data to verify the direct salary costs billed to the AGENCY.
 - 2. Indirect Cost Rate (ICR) Costs: ICR Costs are those costs, other than direct costs, which are included as such on the books of the CONSULTANT in the normal everyday keeping of its books. Progress payments shall be made at the ICR rates shown in attached Exhibits "D" and "E" of this AGREEMENT. Total ICR payment shall be based on Actual Costs. The AGENCY agrees to reimburse the CONSULTANT the actual ICR costs verified by audit, up to the Maximum Total Amount Payable, authorized under this AGREEMENT, when accumulated with all other Actual Costs.

A summary of the CONSULTANT'S cost estimate and the ICR percentage is shown in Exhibits "D" and "E", attached hereto and by this reference made part of this AGREEMENT. The CONSULTANT (prime and all sub-consultants) will submit to the AGENCY within six (6) months after the end of each firm's fiscal year, an ICR schedule in the format required by the AGENCY (cost category, dollar expenditures, etc.) for the purpose of adjusting the ICR rate for billings received and paid during the fiscal year represented by the ICR schedule. It shall also be used for the computation of progress payments during the following year and for retroactively adjusting the previous year's ICR cost to reflect the actual rate. The ICR schedule will be sent to Email: ConsultantRates@wsdot.wa.gov.

Failure to supply this information by either the prime CONSULTANT or any of their sub-consultants shall cause the AGENCY to withhold payment of the billed ICR costs until such time as the required information is received and an overhead rate for billing purposes is approved.

The AGENCY's Project Manager and/or the Federal Government may perform an audit of the CONSULTANT'S books and records at any time during regular business hours to determine the actual ICR rate, if they so desire.

3. Direct Non-Salary Costs: Direct Non-Salary Costs will be reimbursed at the Actual Cost to the CONSULTANT. These charges may include, but are not limited to, the following items: travel, printing, long distance telephone, supplies, computer charges and fees of sub-consultants. Air or train travel will be reimbursed only to economy class levels unless otherwise approved by the AGENCY. The CONSULTANT shall comply with the rules and regulations regarding travel costs (excluding air, train, and rental car costs) in accordance with WSDOT's Accounting Manual M 13-82, Chapter 10 – Travel Rules and Procedures, and revisions thereto. Air, train, and rental car costs shall be reimbursed in accordance with 48 Code of Federal Regulations (CFR) Part 31.205-46 "Travel Costs." The billing for Direct Non-Salary Costs shall include an itemized listing of the charges directly identifiable with the PROJECT. The CONSULTANT shall maintain the original supporting documents in their office. Copies of the original supporting documents shall be supplied to the AGENCY upon request. All above charges must be necessary for the services provided under this AGREEMENT.

- 4. Fixed Fee: The Fixed Fee, which represents the CONSULTANT'S profit, is shown in attached Exhibits "D" and "E" of this AGREEMENT. This fee is based on the Scope of Work defined in this AGREEMENT and the estimated person-hours required to perform the stated Scope of Work. In the event the CONSULTANT enters into a supplemental AGREEMENT for additional work, the supplemental AGREEMENT may include provisions for the added costs and an appropriate additional fee. The Fixed Fee will be prorated and paid monthly in proportion to the percentage of work completed by the CONSULTANT and reported in the Monthly Progress Reports accompanying the billings. Any portion of the Fixed Fee earned but not previously paid in the progress payments will be covered in the final payment, subject to the provisions of Section IX entitled "Termination of Agreement."
- 5. Management Reserve Fund (MRF): The AGENCY may desire to establish MRF to provide the Agreement Administrator with the flexibility to authorize additional funds to the AGREEMENT for allowable unforeseen costs, or reimbursing the CONSULTANT for additional work beyond that already defined in this AGREEMENT. Such authorization(s) shall be in writing and shall not exceed the lesser of \$100,000 or 10% of the Total Amount Authorized as shown in the heading of this AGREEMENT. The amount included for the MRF is shown in the heading of this AGREEMENT. This fund may not be replenished. Any changes requiring additional costs in excess of the MRF shall be made in accordance with Section XIII, "Extra Work."
- 6. Maximum Total Amount Payable: The Maximum Total Amount Payable by the AGENCY to the CONSULTANT under this AGREEMENT shall not exceed the amount shown in the heading of this AGREEMENT. The Maximum Total Amount Payable is comprised of the Total Amount Authorized, and the MRF. The Maximum Total Amount Payable does not include payment for Extra Work as stipulated in Section XIII, "Extra Work." No minimum amount payable is guaranteed under this AGREEMENT.
- B. Monthly Progress Payments: The CONSULTANT may submit billings to the AGENCY for reimbursement of Actual Costs plus the ICR and calculated fee on a monthly basis during the progress of the work. Such billings shall be in a format approved by the AGENCY and accompanied by the monthly progress reports required under Section III, "General Requirements" of this AGREEMENT. The billings will be supported by an itemized listing for each item including Direct (RAW) Labor, Direct Non-Salary, and allowable ICR Costs to which will be added the prorated Fixed Fee. To provide a means of verifying the billed Direct (RAW) Labor costs for CONSULTANT employees, the AGENCY may conduct employee interviews. These interviews may consist of recording the names, titles, Direct (RAW) Labor rates, and present duties of those employees performing work on the PROJECT at the time of the interview.
- C. Final Payment: Final Payment of any balance due the CONSULTANT of the gross amount earned will be made promptly upon its verification by the AGENCY after the completion of the work under this AGREEMENT, contingent, if applicable, upon receipt of all PS&E, plans, maps, notes, reports, electronic data and other related documents which are required to be furnished under this AGREEMENT. Acceptance of such Final Payment by the CONSULTANT shall constitute a release of all claims for payment, which the CONSULTANT may have against the AGENCY unless such claims are specifically reserved in writing and transmitted to the AGENCY by the CONSULTANT prior to its acceptance. Said Final Payment shall not, however, be a bar to any claims that the AGENCY may have against the CONSULTANT or to any remedies the AGENCY may pursue with respect to such claims.

The payment of any billing will not constitute agreement as to the appropriateness of any item and at the time of final audit; all required adjustments will be made and reflected in a final payment. In the event that such final audit reveals an overpayment to the CONSULTANT, the CONSULTANT will refund such overpayment to the AGENCY within thirty (30) calendar days of notice of the overpayment. Such refund shall not constitute a waiver by the CONSULTANT for any claims relating to the validity of a finding by the AGENCY of overpayment. The CONSULTANT has twenty (20) working days after receipt of the final POST AUDIT to begin the appeal process to the AGENCY for audit findings.

D. Inspection of Cost Records: The CONSULTANT and their sub-consultants shall keep available for inspection by representatives of the AGENCY and the United States, for a period of six (6) years after receipt of final payment, the cost records and accounts pertaining to this AGREEMENT and all items related to or bearing upon these records with the following exception: if any litigation, claim or audit arising out of, in connection with, or related to this AGREEMENT is initiated before the expiration of the six (6) year period, the cost records and accounts shall be retained until such litigation, claim, or audit involving the records is completed.

An interim or post audit may be performed on this AGREEMENT. The audit, if any, will be performed by the State Auditor, WSDOT's Internal Audit Office and/or at the request of the AGENCY's Project Manager.

VI. Sub-Contracting

The AGENCY permits subcontracts for those items of SERVICES as shown in Exhibit "A" attached hereto and by this reference made part of this AGREEMENT.

The CONSULTANT shall not subcontract for the performance of any SERVICE under this AGREEMENT without prior written permission of the AGENCY. No permission for subcontracting shall create, between the AGENCY and sub-consultant, any contract or any other relationship.

Compensation for this sub-consultant SERVICES shall be based on the cost factors shown on Exhibit "E" attached hereto and by this reference made part of this AGREEMENT.

The SERVICES of the sub-consultant shall not exceed its maximum amount payable identified in each sub-consultant cost estimate unless a prior written approval has been issued by the AGENCY.

All reimbursable direct labor, indirect cost rate, direct non-salary costs and fixed fee costs for the sub-consultant shall be negotiated and substantiated in accordance with section V "Payment Provisions" herein and shall be memorialized in a final written acknowledgement between the parties.

All subcontracts shall contain all applicable provisions of this AGREEMENT, and the CONSULTANT shall require each sub-consultant or subcontractor, of any tier, to abide by the terms and conditions of this AGREEMENT. With respect to sub-consultant payment, the CONSULTANT shall comply with all applicable sections of the STATE's Prompt Payment laws as set forth in RCW 39.04.250 and RCW 39.76.011.

The CONSULTANT, sub-recipient, or sub-consultant shall not discriminate on the basis of race, color, national origin, or sex in the performance of this AGREEMENT. The CONSULTANT shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the CONSULTANT to carry out these requirements is a material breach of this AGREEMENT, which may result in the termination of this AGREEMENT or such other remedy as the recipient deems appropriate.

VII. Employment and Organizational Conflict of Interest

The CONSULTANT warrants that they have not employed or retained any company or person, other than a bona fide employee working solely for the CONSULTANT, to solicit or secure this contract, and that it has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the CONSULTANT, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of this contract. For breach or violation of this warrant, the AGENCY shall have the right to annul this AGREEMENT without liability or, in its discretion, to deduct from this AGREEMENT price or consideration or otherwise recover the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.

Any and all employees of the CONSULTANT or other persons while engaged in the performance of any work or services required of the CONSULTANT under this AGREEMENT, shall be considered employees of the CONSULTANT only and not of the AGENCY, and any and all claims that may arise under any Workmen's

Compensation Act on behalf of said employees or other persons while so engaged, and any and all claims made by a third party as a consequence of any act or omission on the part of the CONSULTANT's employees or other persons while so engaged on any of the work or services provided to be rendered herein, shall be the sole obligation and responsibility of the CONSULTANT.

The CONSULTANT shall not engage, on a full- or part-time basis, or other basis, during the period of this AGREEMENT, any professional or technical personnel who are, or have been, at any time during the period of this AGREEMENT, in the employ of the United States Department of Transportation or the AGENCY, except regularly retired employees, without written consent of the public employer of such person if he/she will be working on this AGREEMENT for the CONSULTANT.

VIII. Nondiscrimination

During the performance of this AGREEMENT, the CONSULTANT, for itself, its assignees, sub-consultants, subcontractors and successors in interest, agrees to comply with the following laws and regulations:

- Title VI of the Civil Rights Act of 1964
 (42 U.S.C. Chapter 21 Subchapter V § 2000d through 2000d-4a)
- Federal-aid Highway Act of 1973 (23 U.S.C. Chapter 3 § 324)
- Rehabilitation Act of 1973
 (29 U.S.C. Chapter 16 Subchapter V § 794)
- Age Discrimination Act of 1975
 (42 U.S.C. Chapter 76 § 6101 et. seq.)

- Civil Rights Restoration Act of 1987 (Public Law 100-259)
- American with Disabilities Act of 1990
 (42 U.S.C. Chapter 126 § 12101 et. seq.)
- 23 CFR Part 200
- 49 CFR Part 21
- 49 CFR Part 26
- RCW 49.60.180

In relation to Title VI of the Civil Rights Act of 1964, the CONSULTANT is bound by the provisions of Exhibit "F" attached hereto and by this reference made part of this AGREEMENT, and shall include the attached Exhibit "F" in every sub-contract, including procurement of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto.

IX. Termination of Agreement

The right is reserved by the AGENCY to terminate this AGREEMENT at any time with or without cause upon ten (10) days written notice to the CONSULTANT.

In the event this AGREEMENT is terminated by the AGENCY, other than for default on the part of the CONSULTANT, a final payment shall be made to the CONSULTANT for actual hours charged and any appropriate fixed fee percentage at the time of termination of this AGREEMENT, plus any direct non-salary costs incurred up to the time of termination of this AGREEMENT.

No payment shall be made for any SERVICES completed after ten (10) days following receipt by the CONSULTANT of the notice to terminate. If the accumulated payment made to the CONSULTANT prior to Notice of Termination exceeds the total amount that would be due when computed as set forth in paragraph two (2) of this section, then no final payment shall be due and the CONSULTANT shall immediately reimburse the AGENCY for any excess paid.

If the services of the CONSULTANT are terminated by the AGENCY for default on the part of the CONSULTANT, the above formula for payment shall not apply.

In the event of a termination for default, the amount to be paid to the CONSULTANT shall be determined by the AGENCY with consideration given to the actual costs incurred by the CONSULTANT in performing SERVICES to the date of termination, the amount of SERVICES originally required which was satisfactorily completed to

date of termination, whether that SERVICE is in a form or a type which is usable to the AGENCY at the time of termination, the cost to the AGENCY of employing another firm to complete the SERVICES required and the time which may be required to do so, and other factors which affect the value to the AGENCY of the SERVICES performed at the time of termination. Under no circumstances shall payment made under this subsection exceed the amount, which would have been made using the formula set forth in paragraph two (2) of this section.

If it is determined for any reason that the CONSULTANT was not in default or that the CONSULTANT's failure to perform is without the CONSULTANT's or its employee's fault or negligence, the termination shall be deemed to be a termination for the convenience of the AGENCY. In such an event, the CONSULTANT would be reimbursed for actual costs and appropriate fixed fee percentage in accordance with the termination for other than default clauses listed previously.

The CONSULTANT shall, within 15 days, notify the AGENCY in writing, in the event of the death of any member, partner, or officer of the CONSULTANT or the death or change of any of the CONSULTANT's supervisory and/or other key personnel assigned to the project or disaffiliation of any principally involved CONSULTANT employee. The CONSULTANT shall also notify the AGENCY, in writing, in the event of the sale or transfer of 50% or more of the beneficial ownership of the CONSULTANT within 15 days of such sale or transfer occurring. The CONSULTANT shall continue to be obligated to complete the SERVICES under the terms of this AGREEMENT unless the AGENCY chooses to terminate this AGREEMENT for convenience or chooses to renegotiate any term(s) of this AGREEMENT. If termination for convenience occurs, final payment will be made to the CONSULTANT as set forth in the second and third paragraphs of this section.

Payment for any part of the SERVICES by the AGENCY shall not constitute a waiver by the AGENCY of any remedies of any type it may have against the CONSULTANT for any breach of this AGREEMENT by the CONSULTANT, or for failure of the CONSULTANT to perform SERVICES required of it by the AGENCY. Forbearance of any rights under the AGREEMENT will not constitute waiver of entitlement to exercise those rights with respect to any future act or omission by the CONSULTANT.

X. Changes of Work

The CONSULTANT shall make such changes and revisions in the completed work of this AGREEMENT as necessary to correct errors appearing therein, without additional compensation thereof. Should the AGENCY find it desirable for its own purposes to have previously satisfactorily completed SERVICES or parts thereof changed or revised, the CONSULTANT shall make such revisions as directed by the AGENCY. This work shall be considered as Extra Work and will be paid for as herein provided under section XIII "Extra Work."

XI. Disputes

Any disputed issue not resolved pursuant to the terms of this AGREEMENT shall be submitted in writing within 10 days to the Director of Public Works or AGENCY Engineer, whose decision in the matter shall be final and binding on the parties of this AGREEMENT; provided however, that if an action is brought challenging the Director of Public Works or AGENCY Engineer's decision, that decision shall be subject to judicial review. If the parties to this AGREEMENT mutually agree, disputes concerning alleged design errors will be conducted under the procedures found in Exhibit "J". In the event that either party deem it necessary to institute legal action or proceeding to enforce any right or obligation under this AGREEMENT, this action shall be initiated in the Superior Court of the State of Washington, situated in the county in which the AGENCY is located. The parties hereto agree that all questions shall be resolved by application of Washington law and that the parties have the right of appeal from such decisions of the Superior Court in accordance with the laws of the State of Washington. The CONSULTANT hereby consents to the personal jurisdiction of the Superior Court of the State of Washington, situated in the county in which the AGENCY is located.

XII. Legal Relations

The CONSULTANT, any sub-consultants, and the AGENCY shall comply with all Federal, State, and local laws, rules, codes, regulations and all AGENCY policies and directives, applicable to the work to be performed under this AGREEMENT. This AGREEMENT shall be interpreted and construed in accordance with the laws of the State of Washington.

The CONSULTANT shall defend, indemnify, and hold The State of Washington (STATE) and the AGENCY and their officers and employees harmless from all claims, demands, or suits at law or equity arising in whole or in part from the negligence of, or the breach of any obligation under this AGREEMENT by, the CONSULTANT or the CONSULTANT's agents, employees, sub consultants, subcontractors or vendors, of any tier, or any other persons for whom the CONSULTANT may be legally liable; provided that nothing herein shall require a CONSULTANT to defend or indemnify the STATE and the AGENCY and their officers and employees against and hold harmless the STATE and the AGENCY and their officers and employees from claims, demands or suits based solely upon the negligence of, or breach of any obligation under this AGREEMENT by the STATE and the AGENCY, their agents, officers, employees, sub-consultants, subcontractors or vendors, of any tier, or any other persons for whom the STATE and/or the AGENCY may be legally liable; and provided further that if the claims or suits are caused by or result from the concurrent negligence of (a) the CONSULTANT or the CONSULTANT's agents, employees, sub-consultants, subcontractors or vendors, of any tier, or any other persons for whom the CONSULTANT is legally liable, and (b) the STATE and/or AGENCY, their agents, officers, employees, sub-consultants, subcontractors and or vendors, of any tier, or any other persons for whom the STATE and or AGENCY may be legally liable, the defense and indemnity obligation shall be valid and enforceable only to the extent of the CONSULTANT's negligence or the negligence of the CONSULTANT's agents, employees, sub-consultants, subcontractors or vendors, of any tier, or any other persons for whom the CONSULTANT may be legally liable. This provision shall be included in any AGREEMENT between CONSULTANT and any sub-consultant, subcontractor and vendor, of any tier.

The CONSULTANT shall also defend, indemnify, and hold the STATE and the AGENCY and their officers and employees harmless from all claims, demands, or suits at law or equity arising in whole or in part from the alleged patent or copyright infringement or other allegedly improper appropriation or use of trade secrets, patents, proprietary information, know-how, copyright rights or inventions by the CONSULTANT or the CONSULTANT's agents, employees, sub-consultants, subcontractors or vendors, of any tier, or any other persons for whom the CONSULTANT may be legally liable, in performance of the Work under this AGREEMENT or arising out of any use in connection with the AGREEMENT of methods, processes, designs, information or other items furnished or communicated to STATE and/or the AGENCY, their agents, officers and employees pursuant to the AGREEMENT; provided that this indemnity shall not apply to any alleged patent or copyright infringement or other allegedly improper appropriation or use of trade secrets, patents, proprietary information, know-how, copyright rights or inventions resulting from STATE and/or AGENCY's, their agents', officers' and employees' failure to comply with specific written instructions regarding use provided to STATE and/or AGENCY, their agents, officers and employees by the CONSULTANT, its agents, employees, sub-consultants, subcontractors or vendors, of any tier, or any other persons for whom the CONSULTANT may be legally liable.

The CONSULTANT's relation to the AGENCY shall be at all times as an independent contractor.

Notwithstanding any determination by the Executive Ethics Board or other tribunal, the AGENCY may, in its sole discretion, by written notice to the CONSULTANT terminate this AGREEMENT if it is found after due notice and examination by the AGENCY that there is a violation of the Ethics in Public Service Act, Chapter 42.52 RCW; or any similar statute involving the CONSULTANT in the procurement of, or performance under, this AGREEMENT.

The CONSULTANT specifically assumes potential liability for actions brought by the CONSULTANT's own employees or its agents against the STATE and /or the AGENCY and, solely for the purpose of this indemnification and defense, the CONSULTANT specifically waives any immunity under the state industrial insurance law, Title 51 RCW. This waiver has been mutually negotiated between the Parties.

Unless otherwise specified in this AGREEMENT, the AGENCY shall be responsible for administration of construction contracts, if any, on the project. Subject to the processing of a new sole source, or an acceptable supplemental AGREEMENT, the CONSULTANT shall provide On-Call assistance to the AGENCY during contract administration. By providing such assistance, the CONSULTANT shall assume no responsibility for: proper construction techniques, job site safety, or any construction contractor's failure to perform its work in accordance with the contract documents.

The CONSULTANT shall obtain and keep in force during the terms of this AGREEMENT, or as otherwise required, the following insurance with companies or through sources approved by the State Insurance Commissioner pursuant to Title 48 RCW.

Insurance Coverage

- A. Worker's compensation and employer's liability insurance as required by the STATE.
- B. Commercial general liability insurance written under ISO Form CG 00 01 12 04 or its equivalent with minimum limits of one million dollars (\$1,000,000.00) per occurrence and two million dollars (\$2,000,000.00) in the aggregate for each policy period.
- C. Business auto liability insurance written under ISO Form CG 00 01 10 01 or equivalent providing coverage for any "Auto" (Symbol 1) used in an amount not less than a one million dollar (\$1,000,000.00) combined single limit for each occurrence.

Excepting the Worker's Compensation Insurance and any Professional Liability Insurance, the STATE and AGENCY, their officers, employees, and agents will be named on all policies of CONSULTANT and any subconsultant and/or subcontractor as an additional insured (the "AIs"), with no restrictions or limitations concerning products and completed operations coverage. This coverage shall be primary coverage and non-contributory and any coverage maintained by the AIs shall be excess over, and shall not contribute with, the additional insured coverage required hereunder. The CONSULTANT's and the sub-consultant's and/or subcontractor's insurer shall waive any and all rights of subrogation against the AIs. The CONSULTANT shall furnish the AGENCY with verification of insurance and endorsements required by this AGREEMENT. The AGENCY reserves the right to require complete, certified copies of all required insurance policies at any time.

All insurance shall be obtained from an insurance company authorized to do business in the State of Washington. The CONSULTANT shall submit a verification of insurance as outlined above within fourteen (14) days of the execution of this AGREEMENT to:

Name:		
Agency:		
Address:		
City:	State:	Zip:
Email:		
Phone:		
Facsimile [.]		

No cancellation of the foregoing policies shall be effective without thirty (30) days prior notice to the AGENCY.

The CONSULTANT's professional liability to the AGENCY, including that which may arise in reference to section IX "Termination of Agreement" of this AGREEMENT, shall be limited to the accumulative amount of the authorized AGREEMENT amount or one million dollars (\$1,000,000.00), whichever is greater, unless the limit of liability is increased by the AGENCY pursuant to Exhibit H. In no case shall the CONSULTANT's professional liability to third parties be limited in any way.

The parties enter into this AGREEMENT for the sole benefit of the parties, and to the exclusion of any third party, and no third party beneficiary is intended or created by the execution of this AGREEMENT.

The AGENCY will pay no progress payments under section V "Payment Provisions" until the CONSULTANT has fully complied with this section. This remedy is not exclusive; and the AGENCY may take such other action as is available to it under other provisions of this AGREEMENT, or otherwise in law.

XIII. Extra Work

- A. The AGENCY may at any time, by written order, make changes within the general scope of this AGREEMENT in the SERVICES to be performed.
- B. If any such change causes an increase or decrease in the estimated cost of, or the time required for, performance of any part of the SERVICES under this AGREEMENT, whether or not changed by the order, or otherwise affects any other terms and conditions of this AGREEMENT, the AGENCY shall make an equitable adjustment in the: (1) maximum amount payable; (2) delivery or completion schedule, or both; and (3) other affected terms and shall modify this AGREEMENT accordingly.
- C. The CONSULTANT must submit any "request for equitable adjustment," hereafter referred to as "CLAIM," under this clause within thirty (30) days from the date of receipt of the written order. However, if the AGENCY decides that the facts justify it, the AGENCY may receive and act upon a CLAIM submitted before final payment of this AGREEMENT.
- D. Failure to agree to any adjustment shall be a dispute under the section XI "Disputes" clause. However, nothing in this clause shall excuse the CONSULTANT from proceeding with the AGREEMENT as changed.
- E. Notwithstanding the terms and conditions of paragraphs (A.) and (B.) above, the maximum amount payable for this AGREEMENT, shall not be increased or considered to be increased except by specific written supplement to this AGREEMENT.

XIV. Endorsement of Plans

If applicable, the CONSULTANT shall place their endorsement on all plans, estimates, or any other engineering data furnished by them.

XV. Federal Review

The Federal Highway Administration shall have the right to participate in the review or examination of the SERVICES in progress.

XVI. Certification of the Consultant and the Agency

Attached hereto as Exhibit "G-1(a and b)" are the Certifications of the CONSULTANT and the AGENCY, Exhibit "G-2" Certification Regarding Debarment, Suspension and Other Responsibility Matters - Primary Covered Transactions, Exhibit "G-3" Certification Regarding the Restrictions of the Use of Federal Funds for Lobbying and Exhibit "G-4" Certificate of Current Cost or Pricing Data. Exhibit "G-3" is required only in AGREEMENT's over one hundred thousand dollars (\$100,000.00) and Exhibit "G-4" is required only in AGREEMENT's over five hundred thousand dollars (\$500,000.00.) These Exhibits must be executed by the CONSULTANT, and submitted with the master AGREEMENT, and returned to the AGENCY at the address listed in section III "General Requirements" prior to its performance of any SERVICES under this AGREEMENT.

XVII. Complete Agreement

This document and referenced attachments contain all covenants, stipulations, and provisions agreed upon by the parties. No agent, or representative of either party has authority to make, and the parties shall not be bound by or be liable for, any statement, representation, promise or agreement not set forth herein. No changes, amendments, or modifications of the terms hereof shall be valid unless reduced to writing and signed by the parties as a supplement to this AGREEMENT.

XVIII. Execution and Acceptance

This AGREEMENT may be simultaneously executed in several counterparts, each of which shall be deemed to be an original having identical legal effect. The CONSULTANT does hereby ratify and adopt all statements, representations, warranties, covenants, and AGREEMENT's contained in the proposal, and the supporting material submitted by the CONSULTANT, and does hereby accept this AGREEMENT and agrees to all of the terms and conditions thereof.

XIX. Protection of Confidential Information

The CONSULTANT acknowledges that some of the material and information that may come into its possession or knowledge in connection with this AGREEMENT or its performance may consist of information that is exempt from disclosure to the public or other unauthorized persons under either chapter 42.56 RCW or other local, state or federal statutes ("State's Confidential Information"). The "State's Confidential Information" includes, but is not limited to, names, addresses, Social Security numbers, e-mail addresses, telephone numbers, financial profiles, credit card information, driver's license numbers, medical data, law enforcement records (or any other information identifiable to an individual), STATE and AGENCY source code or object code, STATE and AGENCY security data, non-public Specifications, STATE and AGENCY non-publicly available data, proprietary software, State security data, or information which may jeopardize any part of the project that relates to any of these types of information. The CONSULTANT agrees to hold the State's Confidential Information in strictest confidence and not to make use of the State's Confidential Information for any purpose other than the performance of this AGREEMENT, to release it only to authorized employees, sub-consultants or subcontractors requiring such information for the purposes of carrying out this AGREEMENT, and not to release, divulge, publish, transfer, sell, disclose, or otherwise make it known to any other party without the AGENCY's express written consent or as provided by law. The CONSULTANT agrees to release such information or material only to employees, sub-consultants or subcontractors who have signed a nondisclosure AGREEMENT, the terms of which have been previously approved by the AGENCY. The CONSULTANT agrees to implement physical, electronic, and managerial safeguards to prevent unauthorized access to the State's Confidential Information.

Immediately upon expiration or termination of this AGREEMENT, the CONSULTANT shall, at the AGENCY's option: (i) certify to the AGENCY that the CONSULTANT has destroyed all of the State's Confidential Information; or (ii) returned all of the State's Confidential Information to the AGENCY; or (iii) take whatever other steps the AGENCY requires of the CONSULTANT to protect the State's Confidential Information.

As required under Executive Order 00-03, the CONSULTANT shall maintain a log documenting the following: the State's Confidential Information received in the performance of this AGREEMENT; the purpose(s) for which the State's Confidential Information was received; who received, maintained and used the State's Confidential Information; and the final disposition of the State's Confidential Information. The CONSULTANT's records shall be subject to inspection, review, or audit upon reasonable notice from the AGENCY.

The AGENCY reserves the right to monitor, audit, or investigate the use of the State's Confidential Information collected, used, or acquired by the CONSULTANT through this AGREEMENT. The monitoring, auditing, or investigating may include, but is not limited to, salting databases.

Violation of this section by the CONSULTANT or its sub-consultants or subcontractors may result in termination of this AGREEMENT and demand for return of all State's Confidential Information, monetary damages, or penalties.

It is understood and acknowledged that the CONSULTANT may provide the AGENCY with information which is proprietary and/or confidential during the term of this AGREEMENT. The parties agree to maintain the confidentiality of such information during the term of this AGREEMENT and afterwards. All materials containing such proprietary and/or confidential information shall be clearly identified and marked as "Confidential" and shall be returned to the disclosing party at the conclusion of the SERVICES under this AGREEMENT.

The CONSULTANT shall provide the AGENCY with a list of all information and materials it considers confidential and/or proprietary in nature: (a) at the commencement of the term of this AGREEMENT; or (b) as soon as such confidential or proprietary material is developed. "Proprietary and/or confidential information" is not meant to include any information which, at the time of its disclosure: (i) is already known to the other party; (ii) is rightfully disclosed to one of the parties by a third party that is not acting as an agent or representative for the other party; (iii) is independently developed by or for the other party; (iv) is publicly known; or (v) is generally utilized by unaffiliated third parties engaged in the same business or businesses as the CONSULTANT.

The parties also acknowledge that the AGENCY is subject to Washington State and federal public disclosure laws. As such, the AGENCY shall maintain the confidentiality of all such information marked proprietary and/or confidential or otherwise exempt, unless such disclosure is required under applicable state or federal law. If a public disclosure request is made to view materials identified as "Proprietary and/or confidential information" or otherwise exempt information, the AGENCY will notify the CONSULTANT of the request and of the date that such records will be released to the requester unless the CONSULTANT obtains a court order from a court of competent jurisdiction enjoining that disclosure. If the CONSULTANT fails to obtain the court order enjoining disclosure, the AGENCY will release the requested information on the date specified.

The CONSULTANT agrees to notify the sub-consultant of any AGENCY communication regarding disclosure that may include a sub-consultant's proprietary and/or confidential information. The CONSULTANT notification to the sub-consultant will include the date that such records will be released by the AGENCY to the requester and state that unless the sub-consultant obtains a court order from a court of competent jurisdiction enjoining that disclosure the AGENCY will release the requested information. If the CONSULTANT and/or sub-consultant fail to obtain a court order or other judicial relief enjoining the AGENCY by the release date, the CONSULTANT shall waive and release and shall hold harmless and indemnify the AGENCY from all claims of actual or alleged damages, liabilities, or costs associated with the AGENCY's said disclosure of sub-consultants' information.

XX. Records Maintenance

During the progress of the Work and SERVICES provided hereunder and for a period of not less than six (6) years from the date of final payment to the CONSULTANT, the CONSULTANT shall keep, retain and maintain all "documents" pertaining to the SERVICES provided pursuant to this AGREEMENT. Copies of all "documents" pertaining to the SERVICES provided hereunder shall be made available for review at the CONSULTANT's place of business during normal working hours. If any litigation, claim or audit is commenced, the CONSULTANT shall cooperate with AGENCY and assist in the production of all such documents. "Documents" shall be retained until all litigation, claims or audit findings have been resolved even though such litigation, claim or audit continues past the six (6) year retention period.

For purposes of this AGREEMENT, "documents" means every writing or record of every type and description, including electronically stored information ("ESI"), that is in the possession, control, or custody of the CONSULTANT, including, without limitation, any and all correspondences, contracts, AGREEMENT 's, appraisals, plans, designs, data, surveys, maps, spreadsheets, memoranda, stenographic or handwritten notes, reports, records, telegrams, schedules, diaries, notebooks, logbooks, invoices, accounting records, work sheets, charts, notes, drafts, scribblings, recordings, visual displays, photographs, minutes of meetings,

tabulations, computations, summaries, inventories, and writings regarding conferences, conversations or telephone conversations, and any and all other taped, recorded, written, printed or typed matters of any kind or description; every copy of the foregoing whether or not the original is in the possession, custody, or control of the CONSULTANT, and every copy of any of the foregoing, whether or not such copy is a copy identical to an original, or whether or not such copy contains any commentary or notation whatsoever that does not appear on the original.

For purposes of this AGREEMENT, "ESI" means any and all computer data or electronic recorded media of any kind, including "Native Files", that are stored in any medium from which it can be retrieved and examined, either directly or after translation into a reasonably useable form. ESI may include information and/or documentation stored in various software programs such as: Email, Outlook, Word, Excel, Access, Publisher, PowerPoint, Adobe Acrobat, SQL databases, or any other software or electronic communication programs or databases that the CONSULTANT may use in the performance of its operations. ESI may be located on network servers, backup tapes, smart phones, thumb drives, CDs, DVDs, floppy disks, work computers, cell phones, laptops or any other electronic device that CONSULTANT uses in the performance of its Work or SERVICES hereunder, including any personal devices used by the CONSULTANT or any sub-consultant at home.

"Native files" are a subset of ESI and refer to the electronic format of the application in which such ESI is normally created, viewed, and /or modified.

The CONSULTANT shall include this section XX "Records Maintenance" in every subcontract it enters into in relation to this AGREEMENT and bind the sub-consultant to its terms, unless expressly agreed to otherwise in writing by the AGENCY prior to the execution of such subcontract.

In witness whereof, the parties hereto have executed this AGREEMENT as of the day and year shown in the "Execution Date" box on page one (1) of this AGREEMENT.

Signature	Date
Signature	Date
Any modification, change, or reformation of this AGREEM of the Attorney General.	ENT shall require approval as to form by the Office

Exhibit A Scope of Work

Project No.

Exhibit A

Scope of Work

South Boeing Access Road over Airport Way Seismic Retrofit

Submitted to:

City of Tukwila

November 19, 2018

Prepared by: TranTech Engineering, LLC



EXHIBIT A - SCOPE OF WORK SOUTH BOEING ACCESS ROAD OVER AIRPORT WAY SEISMIC RETROFIT

Description

This PROJECT will determine the seismic vulnerability of the existing South Boeing Access Road over Airport Way (SBAR/AW) Bridge and will provide targeted retrofit solutions that will be developed into Plans, Specifications, and Estimates (PS&E) for advertising for construction.

Introduction

The CITY of Tukwila (CITY) has retained TranTech Engineering, LLC (CONSULTANT) to provide a complete PS&E package for the SBAR/AW Seismic Retrofit (PROJECT) in Tukwila, Washington. The following describes the Scope of Work (SCOPE) for this project.

The SBAR/AW was constructed in 1952 in an area of King County that is now the north end of the City of Tukwila. The 4-span bridge is approximately 66 feet wide and 182 feet long (39':52':52':39'). Its superstructure is composed of reinforced concrete T-beam girders made composite with a 6.5" thick concrete deck slab. Its substructure is composed of concrete abutments and multi-column intermediate piers founded on either shallow spread footings or deep pile foundations. At both abutments, rocker bearings are supporting the superstructure and are utilized as part of the bridge's expansion joint system. The bridge carries five lanes of traffic with a 5' wide sidewalk on each side. Piers 3 and 4 are founded on driven steel H-piles.

The first step in the project is to perform a seismic vulnerability assessment of the bridge and prepare a Concept Design Report (CDR) that documents the seismic retrofit solutions for the bridge and associated preliminary cost estimates. Determination of the seismic vulnerability of the bridge and the appropriate retrofit solutions will be performed using detailed structural analysis and engineering judgment. Conceptual level cost estimates will be based on available cost data for similar work with site-specific input related to accessibility and constructability.

The development of the CDR will lead to the development of PS&E for the selected alternative. Anticipated design services include survey and base mapping, geotechnical, environmental documentation/ permitting, and if desired by the City, utility coordination, public involvement, and design and construction management support during construction phase. Construction phase services is anticipated as a future supplement to this SCOPE.

Scope of Work

This SCOPE provides Seismic Analysis, a Concept Design Report, and complete PS&E for the PROJECT. The SCOPE is anticipated to be completed within the relative timeframes shown in the milestone schedule unless the CITY and CONSULTANT approve changes to the schedule dates. The key schedule milestones are shown below. A complete baseline schedule for the PROJECT will be prepared following notice to proceed.

The primary objective of this work is to provide a viable retrofit concept and to advance the proposed solutions, approved by the City, to full design level and to prepare the PS&E for advertisement of the seismic retrofit construction project on the SBAR/AW Bridge.

The anticipated duration for the development of the final bid-ready documents is expected to take approximately 6 months. As mentioned above, the consultant contract will have the option for amendment of additional scope for desired engineering and construction management services during the construction phase of the project. City has the option of renewing the contract each year until completion of the work.

General Assumptions

- Seismic analysis and retrofit will be in accordance with the FHWA Seismic Retrofitting
 Manual for Highway Structures Part 1 Bridges, 2006 (FHWA Retrofitting Manual,) the
 Washington State Department of Transportation Bridge Design Manual (LRFD) (WSDOT
 BDM) and the Washington State Department of Transportation Geotechnical Design Manual
 (WSDOT GDM).
- Funds may be transferred between tasks with prior CITY approval.
- Coordination by the CONSULTANT with outside agencies, groups, or individuals will receive advance approval by the CITY.
- Changes in the detail of work beyond what is described in this SCOPE will be made as requested by the CITY and authorized by amendment as "Out-of-scope" Work.
- The CONSULTANT will support the CITY's Public Works Department. When alternatives are being considered or decisions are being made, the CITY will make all final decisions.
- For any field investigations, acquiring the permission of private landowners whose property would be visited will be the responsibility of the CITY. Permission must be obtained prior to fieldwork on privately owned land.
- The CITY will provide available as-built plans, bridge records, inspection reports, previous study findings and calculations.

- The CITY will provide all real property services for the PROJECT and obtain all property rights necessary to design and construct the Project.
- The CONSULTANT is responsible only for meeting deadlines for their tasks and has no control over those portions of the schedule related to the tasks performed by the CITY or any third party that is retained by the CITY. The CONSULTANT will work with the CITY to the greatest extent feasible to maintain overall PROJECT schedule.
- Additional subsurface investigation and remedial action associated with any hazardous
 wastes located within the PROJECT limits are not within this SCOPE. CONSULTANT will
 provide documentation support as requested based upon data from existing subsurface
 investigation. Because of the inherent uncertainties in subsurface evaluations,
 underground conditions may occur that could affect total PROJECT cost and/or execution.
 These conditions and cost/execution effects are not the responsibility of the CONSULTANT.
- The CONSULTANT will use the following computer software in the performance of the engineering and design work for this contract:
 - Engineering software: SAP2000 or CSI Bridge; Group v.2016; LPile v.2016; XTRACT;
 spColumn v.7; Mathcad v.15
 - o CAD software: AutoCAD and Civil 3D 2015
 - Scheduling software: Microsoft Project or Excel
 - Microsoft Office, Word, Excel (version 2010)
- English units for plans, engineering, and environmental documents
- The CITY and review agencies will take up to ten business days to review milestone submittals. The CITY will be responsible for collecting CITY and review agency comments, resolving conflicting comments, and submitting one set of consolidated comments to the CONSULTANT for each submittal.
- Designated CITY staff will lead and participate in all stakeholder and designated team meetings throughout the life of contract and review and comment on all deliverables outlined in contract.
- Utility potholing is not included in this Scope. Potholing work will be covered in an amendment as out-of-scope work to the PS&E Contract if utility potholing is deemed necessary and essential when the existing utility information is deemed insufficient to identify existing utilities correctly.

Work Performed by the CITY

Throughout the duration of the PROJECT, the CITY will perform services, furnish information, and answer questions on CITY standard procedures for plan preparation.

The following services will be performed by the CITY:

- CITY will provide available as-built plans, bridge records, inspection reports, previous study findings and calculations, etc.
- If necessary, CITY will provide meeting location/conference room for all stakeholder meetings throughout the life of this contract.
- If necessary, Designated CITY staff will lead and participate in all stakeholder meetings throughout life of contract.
- Review and comment on all deliverables outlined in contract.

Milestones Schedule

The schedule of milestones is shown below. The schedule below assumes NTP is received by December 17th, 2018. Delayed NTP will affect the dates shown.

Milestone	Date
Draft CDR	January 28, 2019
Draft CDR Comments Due	Feb 11, 2019
Final CDR	February 25, 2019
Draft 60% PS&E	March 25, 2019
Draft 60% PS&E Comments Due	April 8, 2019
Draft 90% PS&E	May 27, 2019
Draft 90 PS&E Comments Due	June 10, 2019
Final PS&E	July 29, 2019

^{* -} Days are Calendar Days

CDR: Conceptual Design Report

Task 1 Project Management

Task 1.1 Project Management Plan

This Task includes preparation of a Project Management Plan to direct and define the analysis and decision-making process required to complete the project. The plan will include these components:

- Project scope of work
- Project schedule
- Team roles, work assignments and organization
- Team meetings & coordination
- Communications protocols
- Monthly progress and performance reporting
- Records management
- Change control procedures
- Project Safety Plan
- Quality assurance and control
- Closeout of the project

Task 1.2 Project Kickoff and Coordination

The CONSULTANT project manager will provide direction to the PROJECT team, including SUBCONSULTANTs, and conduct PROJECT coordination meetings with appropriate task leaders. The CONSULTANT will coordinate execution of the PROJECT and meet periodically with the CITY Project Manager and staff. Tasks include:

- Conduct a kickoff meeting at the beginning of the PROJECT.
- Develop the PROJECT delivery schedule and update it as changes occur.
- Meet with the CITY Project Manager and/or staff periodically, including review coordination of milestone submittals.

Assumptions:

- The CONSULTANT'S Project Manager and/or project engineer will meet (face-to-face) with the CITY Project Manager up to 10 times.
- Internal PROJECT team coordination meetings will be held on a bi-weekly basis during PROJECT duration. These meetings will be in addition to the coordination meetings held with the CITY but budgeted as part of the specific work tasks.

Deliverables:

- Meeting Agendas in electronic format (MS Word) as needed
- Meeting Minutes in electronic format (MS Word) as needed

Task 1.3 Subconsultant Coordination

The CONSULTANT will provide direction to the SUBCONSULTANTs and review of their work over the course of the PROJECT. Monthly monitoring of the SUBCONSULTANT's design budget will occur over the course of the PROJECT. Status, as well as projections, will be developed. CONSULTANT will monitor SUBCONSULTANT costs and budgets, and propose corrective actions, if necessary. This may include formal SCOPE and/or budget modifications.

Task 1.4 Project Monitoring and Reporting

The CONSULTANT's project manager will monitor the PROJECT planned budget versus actual progress. CONSULTANT will prepare and submit an invoice and a brief progress report monthly that reflects progress over the previous billing period and anticipated activities over the next billing period. The monthly progress report will include a summary of any identified variances from the budget and schedule, reason(s) for the variance, and proposed corrective action(s).

Deliverables:

• Hard copies of Monthly Invoices and Progress Reports

Task 1.5 Quality Control/Quality Assurance Review

This task is for QC/QA review of CONSULTANT deliverables by a designated QC/QA staff member of the CONSULTANT team. The review will cover documents; reports; plans, specifications, and cost estimates; and pertinent information on an ongoing basis. The program entails the periodic review of criteria, design, calculations, and assumptions, as well as concepts and presentation of product format; and documents that the overall PROJECT objectives are being fulfilled.

The following level of structural review will be performed for the following:

 Structural/Retrofit Design Review – The reviewer verifies the reasonableness of the seismic analysis approaches, calculations, details for retrofit concepts, and recommendations.

Task 2 Data Collection and Field Verification

Task 2.1 Bridge Data Collection and Field Verification

The CONSULTANT will gather available information pertinent to the PROJECT, including and not limited to as-built drawings, bridge inspection reports, maintenance records, load rating, and utilities on and adjacent to the bridge.

A site visit of the bridge will be conducted to verify the information shown in the as-built drawings and to document any additional or missing as-built information. The verification will be limited to the information required for the seismic analysis and limited to visual inspection of elements above the ground and out of the water only. The CONSULTANT will inform the CITY of any major discrepancies observed between the site visit and the inspection report.

Assumptions:

- The CITY will provide the available existing information on the PROJECT from CITY records.
- The site visit is not a bridge inspection.
- No traffic control measure is anticipated.
- Site visit to verify as-built information is limited to items readily visible and accessible without special equipment (lift or UBIT) or ladders.

Deliverables

- A brief field visit report describing and documenting overall existing conditions of the bridge and any discrepancies from the as-built drawings.
- Photos of the bridge and site conditions for inclusion in the Concept Design Report and referenced in the Project Definition Report.

Task 3 Geotechnical Engineering and Report

In conjunction with the structural analysis, the CONSULTANT will perform geotechnical engineering and analysis and provide input to the structural engineer(s) to inform the determination of potential vulnerabilities and proposed retrofits.

The AASHTO Guide Specifications for LRFD Seismic Bridge Design requires site-specific ground motion response for structures founded in Site Class F soils. Based on published geologic maps and soil information gathered from previous borings in the PROJECT vicinity, CONSULTANT has determined the anticipated Site Class for seismic design is not Class F. Site-specific ground motion response will not be evaluated for the PROJECT.

Task 3.1 Geotechnical Engineering

The CONSULTANT will:

- Project Setup: The CONSULTANT will set the project up in their accounting program and will develop a health and safety plan for proposed field work.
- Attend Project Kickoff Meeting: The CONSULTANT will attend one project kickoff
 meeting with the City and the design team. This meeting will review project
 objectives, communication protocol and schedule. The CONSULTANT assumes that
 this meeting will take place at the City of Tukwila's office.
- Collect and Review Available Geotechnical Data: The CONSULTANT will review readily available and relevant information along the project corridor. This review will include online geotechnical databases, geologic maps and HWA library.
- Plan Field Exploration Program: The CONSULTANT will plan and coordinate the
 geotechnical exploration program for the project. The exploration program will
 consist of conducting one geotechnical boring at each Pier (5 borings). Planning will
 include identification of the location of the geotechnical borings, development of
 traffic/pedestrian control plans and coordination of required equipment and/or
 flaggers.
- Generate Exploration Work Plan Memo: The CONSULTANT will prepare an
 exploration work plan memorandum of our exploration program. This work plan will
 be submitted to the City for review and approval. The work plan will detail the type,
 location, and extent of proposed field explorations along with logistics necessary to
 perform the work such as traffic control plans and staging areas. The work plan will
 also be used for utility locating clearances and for permitting that may be necessary
 to access the exploration locations.
- Conduct Utility Locates and slope Reconnaissance: Prior to conducting our
 geotechnical borings, the CONSULTANT will make a site visit to mark the proposed
 boring locations and arrange for utility locates using the Utility Notification Center.
 During this site visit the CONSULTANT will perform a slope reconnaissance to
 observe surface soils, slope vegetation, groundwater seeps near the existing bridge.
 A second visit is will be necessary to verify that the proposed boring locations are
 clear of utilities prior to perform the exploration.
- Conduct Geotechnical Explorations: The CONSULTANT will conduct a series of five
 (5) geotechnical borings along the bridge alignment (at each Pier location) to identify the subsurface soil and groundwater conditions align the bridge alignment. Each

- geotechnical boring will be drilled with a mini-track limited access drill rig and logged by an HWA geotechnical engineer or engineering geologist.
- The CONSULTANT will conduct one (1) geotechnical boring near each bridge abutment. The boring at the eastern and western abutments will be drilled in the grassy/gravelly area behind the guard rail. Each of these borings will be drilled to a depth of 30 to 40 feet below ground surface depending on the soil conditions encountered at the time of drilling. The location of both abutment borings will have no impact on pedestrians or vehicular traffic.
- The CONSULTANT will drill one (1) boring at each of the interior piers. Borings for Piers 2 and 3 (deep foundations) will be drilled to a depth of 40 to 50 feet below ground surface depending on the soil conditions encountered at the time of drilling. Boring for Pier 4 (shallow foundation) will be drilled to a depth of 20 feet below ground surface. These borings will be drilled in the grassy area at each shoulder of Airport Way S and on the existing median. The borings will be positioned to maintain traffic along Airport Way S throughout the drilling operation.
- Generate Boring Logs and Assign Laboratory Testing: The CONSULTANT will prepare summary boring logs and perform laboratory testing to evaluate relevant physical properties of the site soils. Laboratory testing could include moisture content, hydrometers, grain-size distribution, Atterberg Limits, direct shear and/or undrained compression test.
- Evaluate Field and Laboratory Data: Based on the borings and the laboratory test
 results of selected samples, the CONSULTANT will generate estimates of the soil
 strength and other properties needed to evaluate the effects the subsurface
 conditions will have on the bridge during a seismic event. Soil properties that will be
 developed include static and dynamic shear strengths, stiffness and low-strain shear
 wave velocities.
- Develop Geologic Profile: The CONSULTANT will develop a geologic profile along the bridge alignment based on the results of the of the subsurface exploration program.
 This geologic profile will be used to evaluate slope stability and other geologic hazards.
- Generate seismic design ground motion parameters for a two-level analysis (100-yr and 1,000-yr return periods) using 2014 USGS Hazard Maps.
- Evaluate geologic hazards. Based on the range of geotechnical soil properties, an evaluation of earthquake-induced geologic hazards that may affect the bridge

- foundation resistances will be performed. Seismic ground motion, slope stability and settlement will be included in the geologic hazard evaluation.
- Evaluate Potential for Liquefaction: The CONSULTANT will evaluate potential for liquefaction, lateral spreading and liquefaction-induced settlement.
- Evaluate Seismic Lateral Earth Pressures at Existing Abutments: The CONSULTANT will evaluate lateral earth pressures at existing abutments under seismic loading conditions.
- Perform geotechnical foundation resistance assessment: The CONSULTANT will
 analyze the existing foundations and soil conditions to develop foundation capacity
 recommendations. This assessment will also consider the results of the geologic
 hazard evaluation, including the potential effects of slope stability on the
 foundations.
- Project Coordination Meetings: The CONSULTANT will attend up to one (1) project coordination meeting at the City of Tukwila's Office. The CONSULTANT's attendance will be used to convey the geotechnical considerations of the site to the City and the design team.
- Geotechnical QA/QC: The CONSULTANT will have all design calculations and recommendations reviewed by a senior principal prior to distribution to the design team or the City.
- Prepare Draft Geotechnical Engineering Memo: The CONSULTANT will prepare a
 draft geotechnical engineering memo for the project. This memo will contain the
 results of the geotechnical engineering investigation, including description of surface
 and subsurface conditions; a site plan showing exploration locations and other
 pertinent features; summary boring logs; and laboratory test results and all AASHTOrequired seismic retrofit design parameter required for the project.
- Respond to City of Tukwila and Design Team Comments: CONSULTANT will review and respond to one round of comments received.
- Miscellaneous Geotechnical Analysis: The CONSULTANT will provide up to 15 hours
 of miscellaneous geotechnical analysis to support the design team with various
 questions and request for additional analysis.
- Geotechnical Task Management: The CONSULTANT will provide geotechnical task
 management to all geotechnical related aspects of the project. The CONSULTANT
 will correspond with the City and the design team in the form of emails, fax, and
 telephone calls, as necessary.

Assumptions:

- The geotechnical explorations proposed herein will not be used to assess site environmental conditions. However, visual or olfactory observations regarding potential contamination will be noted. Analysis, testing, storage, and handling of potentially contaminated soil and ground water (either sampled or spoils from drilling) are beyond this scope of services. If contaminated soils and/or ground water are encountered, the material will be properly contained on-site for disposal as mutually agreed upon without additional cost to CONSULTANT.
- The CONSULTANT will not install any groundwater monitoring wells at the locations of the proposed borings.
- CONSULTANT will identify utilities near the boring locations with a private utility locator and through the Washington Utility Notification Center.
- All non-contaminated drilling spoils and related debris will be drummed on site and transported off site for disposal by the drilling subcontractor.
- All field explorations will be conducted between the hours of 8AM to 5PM.
- All required rights of entry will be provided by the City at no cost to the CONSULTANT.
- The borehole locations will be surveyed by others.
- Relatively disturbed subsurface soil samples will be collected from the borings using the Standard Penetration Test (SPT) at intervals of 2.5 feet in the upper 20 feet and at intervals of 5 feet below 20 feet (if applicable).
- Slope reconnaissance is limited to observation of existing topography and features; no excavation or subsurface exploration will be conducted.
- No detailed soil structure interaction analyses will be completed as part of this work.
- The range of geotechnical soil properties will be based on the review of the available geotechnical and geologic information at the site.
- Structural foundation analysis will be performed using FHWA soil spring guidelines for spread footings and with LPile or Group software.

Deliverables:

- The CONSULTANT will provide an exploration work plan memorandum in PDF format.
- The CONSULTANT will provide a Technical Memorandum describing the geologic/geotechnical conditions, geologic hazard assessment (i.e. slope stability, liquefaction, and settlement), ranges of static and dynamic soil properties for bracketing analyses, geotechnical foundation assessment, and ground motion

hazard response spectrum to be used in the structural analysis. The memorandum will also include a discussion of potential geotechnical issues and additional testing that will need to be addressed during design. (PDF and one (1) hard copy)

Task 4 Environmental

Task 4.1 Kick-Off Meeting and Coordination with WSDOT

CONSULTANT will attend a kick-off meeting with WSDOT to clarify the SCOPE, schedule, and expectations for the environmental components of the PROJECT, and identify key permitting issues that could affect the schedule. A walk through of the PROJECT limits and general reconnaissance by technical team members will be led by the PROJECT team leads after the PROJECT kick-off meeting. Information gathered during the kick-off meeting and environmental site visit will be recorded for inclusion in separate document deliverables, as appropriate, to complete an Environmental Overview Technical Memorandum (TM).

Task 4.2 Environmental Evaluation, Field Work and Documentation

The CONSULTANT will conduct a desktop survey to identify potential environmentally sensitive areas (e.g. wetlands, streams, geologic hazards) within and including an additional 200-foot buffer outside of the PROJECT area boundary. The desktop survey will also include identifying other potential areas of concern including public properties/parks, historic and/or cultural resources, disadvantaged populations, and sensitive noise receptors. Work conducted under this task will be based on internet research and review of existing documentation on the PROJECT area and vicinity.

Additionally, the CONSULTANT will perform a reconnaissance level field investigation to identify potential environmentally sensitive areas within and including an additional 200-foot buffer outside of the PROJECT area boundaries. Field work will be conducted by two (2) CONSULTANT environmental scientists over the course of no more than one (1) day. GPS coordinates will be taken in the field to identify the general boundaries of any environmentally sensitive areas identified during the reconnaissance level field investigation. Field findings will also be documented in the TM.

The CONSULTANT will also identify the necessary environmental documentation materials, if any, that are needed to develop and meet the requirements of the State Environmental Policy Act (SEPA) and the National Environmental Policy Act (NEPA). No actual permit or regulatory documentation (including NEPA and SEPA documentation) will be developed under this task. Information gathered under this task will also be included in the TM.

Task 4.3 Pre-Application Meeting and Coordination with Tukwila

Prior to finalizing the review draft of the TM, the CONSULTANT will arrange and attend a preapplication meeting, if needed, with the City of Tukwila Office of Department of Community Development. The purpose of the meeting is to present the PROJECT and clarify the CITY's land use permitting requirements prior to finalizing the TM. The meeting will be attended by one (1) CONSULTANT senior biologist.

Task 4.4 SEPA/NEPA Documentation

The PROJECT is expected to qualify as Categorical Exclusion (CE) under NEPA and an exemption from SEPA under WAC 197-11-800. For this task, the CONSULTANT will complete the NEPA CE Form and coordinate with the City and WSDOT staff for review and approval signatures on the form. The CONSULTANT will also complete the SEPA Checklist and submit the checklist to the CITY for review by CITY staff along with the appropriate land use application(s). Land use applications that will be required from the CITY for the PROJECT will be based on discussions in the pre-application meeting.

Assumptions:

- Field work will be limited to CITY owned property and/or right-of-entry will have been approved by the CITY prior to initiating any field work.
- The CONSULTANT will be responsible for completing and submitting CITY permit applications for all land use development permits or approvals that are required for the PROJECT.
- CITY staff will be responsible for and obtaining CITY permits and reviews related to land use development applications including administrative review, grading, site plan review, right-of-way use and other related permits as required.
- A SEPA exemption (under WAC 197-11-800) is assumed to be the appropriate SEPA threshold determination.
- Federal funding will require compliance with NEPA. A NEPA CE is assumed to be the appropriate NEPA determination. The NEPA CE Documentation Form will be completed.
- The PROJECT is exempt from Section 106 of the National Historic Preservation Act according to Appendix J, Exhibit B of the October 2018 version of the WSDOT CE Guidebook (A-6). An independent Cultural Resource Survey will not be needed due to the exemption.
- Endangered Species Act compliance will be demonstrated as "no effect" through use of the WSDOT NEPA CE form. An independent Biological Assessment will not be needed due to absence of listed species in or around the project area.

- Environmental Justice will be demonstrated as "no impact to protected populations" through use of the WSDOT CE form. Basic community demographic data will be compiled to demonstrate no protected populations in the project area and a full environmental justice evaluation of the project will not be required.
- No additional federal or state permits or approvals will be required for the PROJECT.

Deliverables:

- Review draft and final Environmental Technical Memoranda in PDF format.
- Review draft and final NEPA CE Documentation Forms in PDF format.
- Review draft and final SEPA Checklists in PDF format.

Task 5 Concept Design Report (CDR)

The CONSULTANT will prepare a Concept Design Report (CDR) providing description of the detailed structural analysis used in the determination of seismic vulnerabilities, and calculated section capacity/demand ratios for both as-built and post-retrofit conditions (on proposed parts/members to be retrofitted identified following as-built condition analyses.) Construction cost estimate and preliminary retrofit plans will be included in the Concept Design Report as appendices. A constructability review of the proposed retrofits will be conducted by the CONSULTANT to inform the selection of the proposed retrofits as well as the construction cost estimates of those retrofits.

Seismic Analysis and CDR Preparation Assumptions:

- Elastic analyses will be performed as part of this SCOPE during a design seismic event. This assessment will be partly based on experience and engineering judgment.
- 2 Structural models (i.e., Spine and 3-D) will be developed based on the as-built drawings, with visual field verification of elements above ground and accessible without special equipment. For each model, two conditions of soft for displacement demand (i.e., liquefied) and rigid for force demand will be studied.
- Structural models will utilize a single spine representing the bridge superstructure, with additional frame elements included to represent crossbeams, columns, and spread footings. Spread footing foundation springs will be established in accordance with procedure outlined in the FHWA Seismic Retrofitting Manual and BDM. Abutments and walls may be modeled with frame or shell elements, at the CONSULTANT's discretion.
- Per AASHTO Guide Specs, seismic analyses are performed for the design 1,000-yr event based on the as-built conditions.

- Foundation analysis will be based on The AASHTO Guide Specifications for LRFD Seismic Bridge Design.
- Live load concurrent with seismic demands will not be considered in the analysis.
- In determining seismic responses, effective member stiffness will be determined based on the FHWA Retrofitting Manual guidelines.
- Expected material properties will be used for all elements in the analysis. Nominal material properties will be used in design or retrofit items only.
- Pushover analysis will be conducted as described in Method D2 of the FHWA Retrofitting Manual: for the 1,000-yr analysis, concrete strain at plastic hinging will be limited to 0.005.

Task 5.1 As-built Analysis

The CONSULTANT will perform seismic analysis of the existing structure to determine potential seismic vulnerabilities. Seismic analyses will include non-linear static 'pushover' and response spectrum dynamic analysis, as well as section capacity determination on parts and/or the whole structures using the bridge seismic retrofit design parameters established in the General Assumptions listed in the SCOPE.

Task 5.2 Post-retrofit Analysis

The CONSULTANT will perform seismic analysis of the existing structures incorporating proposed schematic retrofits developed for the CDR. The schematic retrofits will be analyzed and preliminarily sized for the seismic demands. Seismic analyses will include non-linear static 'pushover' and response spectrum dynamic analysis, as well as section capacity determination on parts and/or the whole structures using the bridge seismic retrofit design parameters established in the General Assumptions listed in the SCOPE.

Assumptions:

 Post-retrofit analysis will be performed incorporating the proposed schematic retrofits developed for the Draft CDR.

Task 5.3 Constructability, Cost Estimate & Construction Schedule

Constructability: The Consultant will review the preliminary retrofit options for practical and cost-effective construction. A memo will address practicality and risks associated with construction.

Cost Estimate: The CONSULTANT will prepare a construction cost estimate (engineer's estimate) based on the 10% Design Plans included in the CDR. Cost estimate will be quantity based using conceptual level unit pricing referenced from WSDOT or other sources as necessary. Cost estimate will include appropriate values for escalation and an estimation of right-of-way costs (if applicable).

Schedule: The CONSULTANT will prepare a construction schedule based on the 10% Design Plans included in the CDR. Construction schedule will be developed in MS Project software.

Task 5.4 Prepare Concept Design Report (CDR)

The CONSULTANT will prepare and submit a draft CDR providing description of the analysis and section capacity/demand ratios, pre- and post-retrofit, on proposed parts/members to be retrofitted. If there are multiple elements for a given structure that require seismic retrofit, the CONSULTANT will identify a recommended priority for the retrofit of the various elements. The CDR will include conceptual retrofit strategies, including the concept details, constructability Memo, and conceptual cost estimates of the proposed retrofit strategies.

The CONSULTANT will revise the draft report based on written comments on the draft report received from the CITY and submit a final report for review and approval.

Assumptions:

Concept Design Report plans and cost estimate will be provided by incorporating the
proposed schematic retrofits developed for the Draft CDR. Inclusion of additional
retrofit concepts or major reconfiguration of the retrofit concepts illustrated in the
Draft CDR will be considered "Out-of-Scope" Work and will be negotiated as such.

Deliverables:

- Draft Conceptual Design Report one (1) electronic (PDF) and one (1) hard copy
- Final Conceptual Design Report one (1) electronic (PDF) and two (2) hard copies

Task 6 Survey Mapping

CONSULTANT will provide limited topographic mapping to provide a preliminary base map. Mapping limits will extend 200 feet east and west beyond bridge abutments on S. Boeing Access Rd. over I-5 and 200 feet north and south along Airport Way S. from the intersection of S. Boeing Access Rd.

Task 6.1 Geodetic and Cadastral Survey Control

Horizontal Datum and Coordinate System – survey work shall reference the Washington State Plane Coordinate System using the NAD83 (2011) datum as established in accordance with Chapter 58.20 Revised Code of Washington and shall be in US Survey Foot units. The horizontal control to establish ties to the datum shall be shown on the plans and/or in the surveyor notes. The Vertical Datum shall reference the North American Vertical Datum of 1988 (NAVD 1988). The benchmark used to establish ties to the datum shall be shown on the plans and/or in the surveyor's notes.

Task 6.2 Utility Location Service

CONSULTANT will utilize a private utility location service to mark the underground utilities within the project corridor prior to survey field work. The expense for this service is included in the survey budget estimate as "other direct cost".

Task 6.3 Mapping

CONSULTANT shall locate and map visible features for engineering design within the mapping corridor. These features include: mapping will include roads, surface utility features, overhead power lines, stairs, slopes, geotechnical boring locations, and bridge columns.

- Roadway features, curbs, sidewalks, seams.
- Bottom of soffit of exterior girder of bridge over I-5, every 7-feet and at piers.
- Surface utilities
- Overhead power lines
- Stairs
- Slopes
- Geotechnical boring locations
- Bridge columns and abutments, bottom of soffit of exterior girder every 7-feet and at piers.
- Ground measurements sufficient to generate a digital terrain model (DTM) for 1-foot contours.

Task 6.4 Right-of-Way and Property Lines

CONSULTANT WILL SHOW Right-of-Way and property lines in the base mapping and based on available GIS information.

Deliverables

Civil 3D 2016 project basemap at 1" = 20' scale with 1-foot contour intervals.

Assumptions

- Traffic control safety plans will be developed by others for surveying purposes.
- Property corners will not be set in conjunction with this survey.
- Sub-surface utility marking by others and invoiced as "other direct costs".
- CONSULTANT will not access any area that is unsafe for any reason.
- CONSULTANT is not responsible for delays caused by others that may delay 1 Alliance deliverables or delays caused by unsafe conditions.
- Traffic control safety plans will be developed by others for surveying purposes.
- Street use permits for surveying are not included under this scope of work.

Task 7 Traffic Analysis

Although permanent channelization and/or signalization changes are not anticipated as part of this project, the CONSULTANT shall prepare a Traffic Control Plans that will go together with the construction of the intended retrofit scheme and to ensure that mobility of traffic is not hindered. The exact limits of the traffic control will be determined jointly between the CITY and the CONSULTANT but are typically expected to extend to the next adjacent street intersection or 1/4-mile in each direction along the roadway, whichever is least.

Deliverables:

- Draft Traffic Control Plans- PDF and 1 hardcopy
- Final Traffic Control Plans PDF and 1 hardcopy

Task 8 Plans, Specifications, and Engineer's Estimate

The CONSULTANT will prepare contract plans, specifications and engineer's estimate of probable construction costs for the seismic retrofit of the SBAR/AW Bridge, as illustrated in the Concept Design Report.

Seismic Retrofit Contract Plans

CONSULTANT will advance design of the recommended retrofit presented in the CDR and prepare contract plans of those solutions for Project advertisement. The CONSULTANT will prepare 60%, 90%, and final contract plans for CITY review, comment, approval and advertisement. CONSULTANT will maintain design documentation including design calculations. CONSULTANT will develop the following:

	PS&E Assumed	PS&E Subn	nittal Phase	
Sheet Name	Number of Sheets	60%	90%	100%
Cover Sheet	1	Χ	Χ	Х
Index Legend and Abbreviations	1	Χ	Χ	Χ
General Notes	1	Χ	Χ	X
Site Prep and TESC	1	Χ	Χ	X
Construction Staging	1	Χ	Χ	Х
Grading and Slope Protection (Asdesired)	2	х	х	х
Traffic Control & Detour (MOT)	4	Χ	Χ	Х
Bridge Plan & Elevation – Retrofit	1	Х	Х	Х
Locations		^	^	^
General Structural Notes	1	Χ	Χ	X
Bridge Construction Sequencing	1	Χ	Χ	Х
West Abutment Retrofit and Details	2	Χ	Χ	Χ
Pier 1 Retrofit - Elevation	1	Χ	Χ	Χ
Pier 2 Retrofit - Elevation	1	Χ	Χ	Χ
Pier 3 Retrofit - Elevation	1	Χ	Χ	Χ
Pier 1, 2, and 3 Retrofit Details	2	Χ	Χ	Χ
East Abutment Retrofit & Details	2	Χ	Χ	X
East and West Abutment Bearing	2	Х	Х	Х
Replacement		۸	^	^
Superstructure Retrofit and Details	2	Χ	Χ	Χ
Misc. Bridge Repairs	1	Χ	Χ	Х

Seismic Retrofit Specifications

The CONSULTANT will use the CITY of Tukwila Standard Specifications 2017 in preparing the Project's specifications and Project Manual. The CONSULTANT will modify the standard specifications by preparing contract special provisions. In addition, the CONSULTANT will

prepare Special Provisions for contract specific requirements when the standard specifications do not cover a certain work element.

For the 60% submittal and all subsequent submittals, the CONSULTANT will submit a complete Project Specifications Manual including Divisions 0-9 with a bid form, special provisions and general special provisions that apply to the Project. The CONSULTANT will stamp the second page of the Project Specifications Manual.

Assumptions:

- City will supply a "boilerplate" version of the project specifications manual which will include a cover page, advertisement, signature page, a table of contents, Division 0, standard and general special provisions for Divisions 1 through 9, and standard CITY Appendix items.
- For the technical special provisions, Divisions 2 through 9 and portions of Division 1 including environmental requirements and maintenance of traffic, City boilerplate files are provided for the CONSULTANT's use. The CONSULTANT is responsible for evaluating the applicability of each section to their specific contract. The CONSULTANT is responsible for the technical special provisions of the contract.
- The final submittal for PROJECT advertisement will reflect the most recent version of City's boilerplate which may change at any point during design development.

Seismic Retrofit Engineer's Estimate

The CONSULTANT will prepare an engineer's estimate for the PROJECT at the 60%, 90%, final design and bid ready levels of completion. The estimates will be prepared using documented unit costs, lump-sum prices, and from Consultant's experience on similar projects. The CONSULTANT will submit unit price documentation for nonstandard work items and review and modify, as needed, the appropriateness of the unit costs, lump-sum prices, and other cost data that the CONSULTANT uses. After the 90% design is completed, the Consultant will conduct a bottom-up independent cost estimate in addition to the unit price cost estimate. This estimate is intended to provide additional cost certainty before construction contract advertisement.

PROJECT cost estimates will include appropriate contingency factors to account for PROJECT uncertainties that cannot be accounted for at the PROJECT's various engineering stages.

In providing opinions of cost, and schedules for the PROJECT, the CONSULTANT will have no control over cost or price of labor and materials; unknown or latent conditions of existing equipment or structures that might affect operation or maintenance costs; competitive bidding procedures and market conditions; time or quality of performance by operating personnel or third parties; and other economic and operational factors that might materially affect the

ultimate PROJECT cost or schedule. The CONSULTANT, therefore, will not warranty that the actual PROJECT costs, financial aspects, economic feasibility, or schedules will not vary from CONSULTANT's opinions, analyses, projections, or estimates.

Assumptions:

- Engineer's estimate will be prepared using the CONSULTANTS standard estimating spreadsheet.
- All Seismic Retrofit 'items' will be prepared as lump sum items with a lump sum breakdown provided.

Deliverables:

- One (1) electronic copy of the engineer's estimate at the 60%, 90%, final review submittals and the bid submittal.
- Independent bottom up cost estimate at 90% design.

Task 8.1 60% Submittal

The 60% submittal will include two (2) half-size plans, project manuals, and cost estimates. Up to two (2) copies of the 60% construction schedule will be provided. Electronic copies of all files will be provided in PDF format. An electronic copy of the Project Specifications Manual will be provided in Word format. Hard-copy sheets will match the electronic files that are submitted. The cost estimate will be formatted to reflect the bid item breakdown.

Deliverables:

- Two (2) hardcopies of half size plans.
- Two (2) hardcopies of the Project Specifications Manual. An electronic copy of the Project Specifications Manual in PDF format. An electronic copy of the Project Specifications Manual in Word format (no Appendix).
- Two (2) hardcopies of the cost estimate. An electronic copy of the cost estimate in Excel and PDF formats.
- An electronic copy of the construction schedule in PDF format.

Task 8.2 90% Submittal

The 90% submittal will include two (2) half-size plans and project manuals and up to two (2) construction schedules and estimates. Electronic copies of the plans, cost estimate, construction schedule and responses to 60% comments response will also be provided. Hard-copy sheets will match the electronic files that are submitted. The work will be substantially complete. Drawings will be completed and checked in accordance with established QC procedures and will have incorporated or resolved comments made during the 60% design review and other informal reviews. The cost estimate will be formatted to reflect the bid item breakdown utilizing CITY cost estimating form.

Deliverables:

- Two (2) hardcopies of half size plans. An electronic copy of the plans in PDF format.
- Two (2) hardcopies of the Project Specifications Manual. An electronic copy of the Project Specifications Manual in PDF format. An electronic copy of the Project Manual in Word format (no Appendix).
- Two (2) hardcopies of the cost estimate. An electronic copy of the cost estimate in PDF format.
- An electronic copy of responses to 60% comments in Excel and PDF formats.
- An electronic copy of the construction schedule in PDF format.

Task 8.3 Final (100%) Submittal

The final submittal will include two (2) half-size plans, two (2) project manuals and responses to 90% comments. Electronic copies of all files will be provided. Hard-copy sheets will match the electronic files that are submitted.

The Bid Submittal will include one (1) full-size plan set, one (1) half-size plan set printed on bond paper. Drawings will be stamped and signed by the appropriate CONSULTANT team professional licensed in the State of Washington. Hard-copy sheets will match the electronic files. Final drawing check prints (prepared in accordance with established QC procedures) will be submitted to the CITY.

Deliverables:

- One (1) stamped, signed Project Specifications Manual.
- An electronic copy of the Engineer's Estimate.
- One (1) half size hardcopy of the plans.



Exhibit C Preparation and Delivery of Electronic Engineering and Other Data

In this Exhibit the agency, as applicable, is to provide a description of the format and standards the consultant is

to use in preparing electronic files for transmission to the agency.	The format and standards to be provided may
include, but are not limited to, the following:	

Surveying, Roadway Design & Plans Preparation Section

A. Survey Data

B. Roadway Design Files

C. Computer Aided Drafting Files

D. Specify the Agency's Right to Review Product with the Consultant	
E. Specify the Electronic Deliverables to Be Provided to the Agency	
	D 11
F. Specify What Agency Furnished Services and Information Is to Be	Provided
	Agreement Number:

II.	Any Other Electronic Files to Be Provided	
Ш	Methods to Electronically Exchange Data	
111.	Wiedlods to Diectromeany Exchange Data	

A. Agency Software Suite	
B. Electronic Messaging System	
C. File Transfers Format	

Exhibit D Prime Consultant Cost Computations

Project No.

City of Tukwila South Boeing Access Road over Airport Way Seismic Retrofit

Tra	 	 	

Total Costs

		<u>-</u>				Direct		
Classification			Hrs.	. X		Rate	=	Cost
Project Manager			120		\$	57.50		\$6,900
Construction Manager			66	;	\$	79.00		\$5,214
Senior Structural Engineer (QA/QC)			84		\$	70.00		\$5,880
Project Structural Engineer			170		\$	55.00		\$9,350
Senior Structural Engineer			182		\$	62.00		\$11,284
Senior Civil Engineer			114		\$ \$	52.00		\$5,928
Staff Structural Engineer 1			104		\$	33.00		\$3,432
Senior CAD Technician			136		\$ \$	37.00		\$5,032
Office Engineer			98		\$	38.00		\$3,724
Administrative 2			36		\$	22.00		\$792
Staff Structural Engineer 2			160		\$	42.00		\$6,720
Staff Structural Engineer 2			80)	\$	45.00		\$3,600
	•	Total Hrs.	1350					
Salary Cost							\$	67,856
Salary Escalation Cost (estimated)								
Escalation - % of Labor Cost	0%	per year @	1	year(s)				\$0
Total Salary Cost							\$	67,856
0 1 10 10	4.40.040/	(D: ()					•	400.0
Overhead Cost @		of Direct La					\$	100,977
Net Fee @ Total Overhead & Net Fee Cost	30.0%	of Direct La	abor				<u>\$</u>	20,357 121,333
Total Overnead & Net I ee Cost							Ψ	121,000
Direct Expenses	No.	Unit	Each	١		Cost		
Reproduction Costs	110.	0	Luoi			0001		
Copies	400	pages @	\$0.08	/page	\$	24.00		
Reports		reports @		/report	\$	120.00		
Plans	3		\$20		\$	60.00		
		sets @		/561				
Parking	0	@	\$8		\$	-		
Mail/Deliveries/Fed Ex	4	@	\$24	/ !! -	\$	96.00		
Mileage	258	miles @	\$0.545	/mile	\$	140.61		
Subtotal							\$	441
TranTech Total							\$	189,630
Subconsultants							•	,
		-	W/DBE	M/DBE		Hrs		\$ Total
Landau Associates, Inc.	-				-	77	\$	11,195
111111111111111111111111111111111111111						340	\$	65,493
HWA GeoSciences, Inc.						203	\$	48,793
1 Alliance								
	Total	0.0%	0.0%	0.0%		620		
	Total	0.0%	0.0% 0%	0.0%		620	\$	125,482

315,112

		TT % of	Total Total			\$1,065 0.59%		.l.	\$2,186 1.78%			\$44,492 21.33%		\$2,102		\$2,102												
		Щ	Total	hrs		œ	126	24	24	106		288		4		4												
	12	Staff Structural Engineer 2	\$45.00 Total	hrs																								
	11	Staff Structural Engineer 2	\$42.00 Total	hrs																								
	10	S əvitsıtainimbA	\$22.00 Total	hrs					8			∞																
City of Tukwila g Access Road over Airport Way Seismic Retrofit	6	Office Engineer	\$38.00 Total	hrs		4	. 42	. &	16	8		24		2		2												
mic R	80	Senior CAD Technician	\$37.00 Total	hrs		_	80	,				∞			Ш		_											
/ Seis	7	Staff Structural Engineer 1	\$33.00 Total	hrs			00	,				∞		4	Ш	4												
rt Way	9	Senior Civil Engineer	\$52.00 Total	hrs		_	80	,		8		16			Ш		_											
kwila Airpo	5	Senior Structural Engineer	\$62.00 Total	hrs	_	_	80	,		8		9			Щ	_							_					
City of Tukwila oad over Airpo	4		\$55.00 Total			_	∞	1		8	Ш	16			\perp	_	_					_						
City	3	Senior Structural Engineer (QA/QC)	\$70.00 Total	hrs		_	00	1		09	Ц	88			\perp	_	_			_								
seess	2	Construction Manager	Total	hrs	_	_	00	1		9		1		4	\perp	4	_			4								
ing Ac	1		5: \$57.50 Total	hrs		4	52	16		8		80		4	Ш	4					<u></u>							
South Boein	C.		direct rates:							iew		Work Element 1.0 Total	tion	ation		Work Element 2.0 Total	chnical Memo		ibit	i	Work Element 3.0 Total		VSDOT	nd Documentation	on with Tukwila			
	TranTech, LLC	Work Element			Project Management	Project Management Plan	Project Kickoff and Coordination	Subconsultant Coordination	Project Monitoring and Reporting	Quality Control / Quality Assurance Review			Data Collection and Field Verification	Bridge Data Collection and Field Verification			Geotechnical Engineering and Technical Memo	Geotechnical Engineering	See HWA Geotechnical Sciences Exhibit			Environmental	Kickoff Meeting and Coordination with WSDOT	Environmental Evaluation, Field Work and Documentation	Pre-Application Meeting and Coordination with Tukwila	SEPA/NEPA Documentation	See Landau Associates Exhibit	
		Work Element #			0,	- 1	1.2	1.3	1.4	1.5			2.0	2.1			3.0	3.1				4.0	4.1	4.2	4.3	4.4		

	TranTech, LLC	-	2	8	4	2	9	7	8	6	10	11 12	2		
Work Element#	Work Element	Project Manager	Construction Manager	Senior Structural Engineer (QA/QC)	Project Structural Engineer	Senior Structural Engineer	Senior Civil Engineer	Signaff Structural Engineer 1	% Senior CAD Technician	% Office Engineer	S evitstratinimbA 8000	25 Staff Structural Engineer 2	7.0000607.00000000000000000000000000000	E	% of
		Total hrs	Total hrs	Total hrs	Total Thrs	Total T hrs	-	Fotal T hrs	Total To	Fotal Te	Total To	_	tal Total	I Total	Total Hours
	Work Element 4.0 Total									_	_	_			
5.0	Concept Design Report				- !		-		-	-	-				ì
5.1	As-Built Analysis				72	24		8 2	8 2	∞ α		16	76	\$10,27	_ ~
5.3	Constructability. Cost Estimate and Construction Schedule		12		P	2			1			3	12	\$2.64	0.89%
5.4	Prepare Concept Design Report (CDR)	8		16				12		8	8	40	92	\$11,532	
	Work Element 5.0 Total	∞	12	16	52	2		44	32	24	- 8	136	396	\$52,394	4 29.33%
								_		_		_			
6.0	Survey Mapping				_	_	_	-	-	_	_	_			
6.1	Geodetic and Cadastral Survey Control														
6.3	Mapping												T		
6.4	Right-of-Way and Property Lines														
	See 1 Alliance Exhibit														
	Work Element 6.0 Total									-					
7.0	Traffic Analysis				_	_	_	_	_	_	_	_			
	Traffic Control Plans						09		16				76	\$10,349	5.63%
				1	1	1				-	-	-	í		
	Work Element 7.0 Total						09	┢	16			⊩	92	\$10,349	5.63%
8.0	Plans, Specifications, and Engineer's Estimate			-	-	-	-	-	-	-	-	-			
8 2.1	60% PS&E Submittal	12			32	32	α	32	32	_	_	24	174	\$22.79	12.89%
0.1.0 7.1.0	60% Specifications	7			γ α	25 &	οα	32	35	7 0	α	33		\$8.487	
8.1.3	60% Cost Estimate		16		D	5	0			7 2	0	5	18	\$3,736	1.33%
8.2	90% PS&E Submittal			-	_	-	_	-	=	-	-	_			
8.2.1	90% Plans	8			32	32	80	16	32	2			130	•	9.63%
8.2.2	90% Specifications				®	80	8	-	=	2	8	32		\$8,487	

	% of		Total	Hours	0.74%		4.74%	2.52%	1.04%	42.67%				100.00%
	F		Total	\$	\$1,974		\$9,234	\$4,422	\$2,855	\$79,851		707	\$125,923	\$315,112
	Ė		Total	hrs	10		64	34	14	576				1350
12	Staff Structural Engineer 2	\$45.00	Total	hrs				16		80				80
11	Staff Structural Engineer 2	\$42.00	Total	hrs						24				160
10	S əvitsıtainimbA	\$22.00	Total	hrs				4		20				36
6	Office Engineer	\$38.00	Total	hrs	2		7	2	2	18				86
8	Senior CAD Technician	\$37.00	Total	hrs			16			80				136
7	Staff Structural Engineer 1	\$33.00	Total	hrs						48				104
9	Senior Civil Engineer	\$52.00	Total	hrs			9			38				114
2	Senior Structural Engineer	\$62.00	Total	hrs			16	9		102				182
4	Project Structural Engineer	\$55.00	Total	hrs			16	9		102				170
3	Senior Structural Engineer (QA/QC)	\$70.00	Total	hrs										84
2	Construction Manager	\$79.00	Total	hrs	8				12	88				99
1	Project Manager	\$57.50	Total	hrs			8			28				120
TranTech, LLC	Work Element	direct rates:			90% Cost Estimate	100% PS&E Submittal	100% Plans	100% Specifications	100% Cost Estimate	Work Element 8.0 Total	TOOO GIIO GOT MOITAGNICAN THIIGG	EXPENSES INCLIDING SUBCONSTITUTES	SALARY ESCALATION SALARY ESCALATION	PROJECT WORK ELEMENTS TOTALS
	Work Element #				8.2.3	8.3	8.3.1	8.3.2	8.3.3					PROJECT

Exhibit D Prime Consultant Cost Computations



Transportation Building 310 Maple Park Avenue S.E. P.O. Box 47300 Olympia, WA 98504-7300 360-705-7000 TTY: 1-800-833-6388 www.wsdot.wa.gov

May 22, 2018

TranTech Engineering, LLC 12011 NE 1st Street, Suite 305 Bellevue, WA 98005

Subject: Acceptance FYE 2017 ICR – Audit Office Review

Dear Mr. Kash Nikzad:

Transmitted herewith is the WSDOT Audit Office's memo of "Acceptance" of your firm's FYE 2017 Indirect Cost Rate (ICR) of 148.81%. This rate will be applicable for WSDOT Agreements and Local Agency Contracts in Washington only. This rate may be subject to additional review if considered necessary by WSDOT. Your ICR must be updated on an annual basis.

Costs billed to agreements/contracts will still be subject to audit of actual costs, based on the terms and conditions of the respective agreement/contract.

This was not a cognizant review. Any other entity contracting with your firm is responsible for determining the acceptability of the ICR.

If you have any questions, feel free to contact our office at (360) 705-7019 or via email consultantrates@wsdot.wa.gov.

Regards;

Jonson, Erik

May 23 2018 8:37 AM

cosign

ERIK K. JONSON

Manager, Consultant Services Office

Bruhk. Joan

EKJ:kms

Actuals Not To Exceed Table (ANTE)

WSDOT Agreement:

TranTech Engineering, LLC 365 118th Ave. SE Suite 100 Bellevue, WA 98005

		Direct	Overhead	Fixed Fee	All Inclusive
Job Classifications	-	Labor Rate	NTE*	NTE	Hourly Billng
	-	NTE*	148.81%	30.00%	Rate NTE
Administrative 1		\$20.00	\$29.76	\$6.00	\$55.76
Administrative 2		\$30.00	\$44.64	\$9.00	\$83.64
Administrative 3		\$40.00	\$59.52	\$12.00	\$111.52
Office Assistant		\$20.00	\$29.76	\$6.00	\$55.76
Office Engineer		\$45.00	\$66.96	\$13.50	\$125.46
Senior CAD Technician		\$42.00	\$62.50	\$12.60	\$117.10
Staff Structural Engineer 1		\$42.00	\$62.50	\$12.60	\$117.10
Staff Structural Engineer 2		\$45.00	\$66.96	\$13.50	\$125.46
Project Structural Engineer		\$60.00	\$89.29	\$18.00	\$167.29
Senior Structural Engineer		\$70.00	\$104.17	\$21.00	\$195.17
Project Manager		\$65.00	\$96.73	\$19.50	\$181.23
Construction Inspector		\$45.00	\$66.96	\$13.50	\$125.46
Construction Senior Inspector		\$60.00	\$89.29	\$18.00	\$167.29
Construction Manager		\$79.00	\$117.56	\$23.70	\$220.26
Resident Engineer		\$79.00	\$117.56	\$23.70	\$220.26
Principal		\$89.00	\$132.44	\$26.70	\$248.14
Engineer		\$35.00	\$52.08	\$10.50	\$97.58
Marine Engineer		\$70.00	\$104.17	\$21.00	\$195.17
Staff Civil Engineer		\$40.00	\$59.52	\$12.00	\$111.52
Project Civil Engineer		\$50.00	\$74.41	\$15.00	\$139.41
Senior Civil Engineer		\$60.00	\$89.29	\$18.00	\$167.29
Specialty Technician		\$45.00	\$66.96	\$13.50	\$125.46
			\$0.00	\$0.00	\$0.00

Exhibit E Subconsultant Cost Computations

Subconsultant Cost Computations
Project No.

City of Tukwila South Boeing Access Road over Airport Way Seismic Retrofit

HWA GeoSciences, Inc	C.
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HWA GeoSciences, Inc. Total

						Direct		
Classification			Hrs.	Х		Rate	=	Cost
Administrative Support			2		\$	23.00		\$4
CAD			15		\$	38.00		\$57
Contracts Administrator			2		\$	34.00		\$6
Geologist IV			6		\$	36.50		\$21
Geologist V			14		\$	40.00		\$56
Geologist VII			0		\$	64.00		\$
Geotechnical Engineer I			155		\$	34.61		\$5,36
Geotechnical Engineer II			0		\$	36.00		\$
Geotechnical Engineer IV			103		\$	46.00		\$4,73
Geotechnical Engineer VI			36		\$	63.00		\$2,26
Hydrogeologist VI			0		\$	40.00		\$
Lab/Field Technician I			0		\$	21.00		\$
Lab/Field Technician II			0		\$	28.00		\$
Lab/Field Technician III			0		\$	35.00		\$
Principal IX			7		\$	84.62		\$59
Principal VIII			0		\$	76.00		\$
			0					\$
	-	Total Hrs.	340					
Salary Cost							\$	14,42
0-1								
Salary Escalation Cost (estimated)		nor.voor @	4	,, a w (a)				# 40
Escalation - % of Labor Cost		per year @	1 y	/ear(s)			•	
		per year @	1 y	/ear(s)			\$	
Escalation - % of Labor Cost Total Salary Cost	3%			ear(s)				\$43 14,85
Escalation - % of Labor Cost Total Salary Cost Overhead Cost @	3% 194.47%	of Direct Labo	or	/ear(s)			\$	14,85 28,89
Escalation - % of Labor Cost Total Salary Cost Overhead Cost @ Net Fee @	3% 194.47%		or	ear(s)			\$ \$	14,85 28,89 4,45
Escalation - % of Labor Cost Total Salary Cost Overhead Cost @	3% 194.47%	of Direct Labo	or	vear(s)			\$	14,85 28,89 4,45
Escalation - % of Labor Cost Total Salary Cost Overhead Cost @ Net Fee @ Total Overhead & Net Fee Cost Direct Expenses	3% 194.47%	of Direct Labo	or	/ear(s)		Cost	\$ \$	14,85 28,89
Escalation - % of Labor Cost Total Salary Cost Overhead Cost @ Net Fee @ Total Overhead & Net Fee Cost Direct Expenses Reproduction Costs	3% 194.47% (30.0% (of Direct Labo of Direct Labo Unit	or or Each			Cost	\$ \$	14,85 28,89 4,45
Escalation - % of Labor Cost Total Salary Cost Overhead Cost @ Net Fee @ Total Overhead & Net Fee Cost Direct Expenses Reproduction Costs Copies	3% 194.47% (30.0% (of Direct Labo of Direct Labo Unit pages @	Each \$0.06 /	page	\$	-	\$ \$	14,85 28,89 4,45
Escalation - % of Labor Cost Total Salary Cost Overhead Cost @ Net Fee @ Total Overhead & Net Fee Cost Direct Expenses Reproduction Costs Copies Reports	3% 194.47% (30.0% (No. 0 2	of Direct Labor of Direct Labor Unit pages @ reports @	Each \$0.06 /j	page report	\$ \$	Cost _ _ 30.00	\$ \$	14,85 28,89 4,45
Escalation - % of Labor Cost Total Salary Cost Overhead Cost @ Net Fee @ Total Overhead & Net Fee Cost Direct Expenses Reproduction Costs Copies Reports Plans	3% 194.47% (30.0% (No. 0 2 0	Unit pages @ reports @ sets @	Each \$0.06 / ₁ \$15 / ₁ \$2 / ₅	page report	\$ \$ \$	- 30.00 -	\$ \$	14,85 28,89 4,45
Escalation - % of Labor Cost Total Salary Cost Overhead Cost @ Net Fee @ Total Overhead & Net Fee Cost Direct Expenses Reproduction Costs Copies Reports Plans Parking	3% 194.47% (30.0% (No. 0 2 0 2	Unit pages @ reports @ sets @ @	Each \$0.06 / \$15 / \$2 /s	page report	\$ \$ \$	- 30.00 - 16.00	\$ \$	14,85 28,89 4,45
Escalation - % of Labor Cost Total Salary Cost Overhead Cost @ Net Fee @ Total Overhead & Net Fee Cost Direct Expenses Reproduction Costs Copies Reports Plans Parking Mail/Deliveries/Fed Ex	3% 194.47% (30.0% (No. 0 2 0	Unit pages @ reports @ sets @ @ @	Each \$0.06 // \$15 // \$2 /s \$8 \$20	page report	\$ \$ \$ \$	- 30.00 - 16.00 40.00	\$ \$	14,85 28,89 4,45
Escalation - % of Labor Cost Total Salary Cost Overhead Cost @ Net Fee @ Total Overhead & Net Fee Cost Direct Expenses Reproduction Costs Copies Reports Plans Parking Mail/Deliveries/Fed Ex Drilling Subcontractor	3% 194.47% (30.0% (No. 0 2 0 2	Unit pages @ reports @ sets @ @	Fach \$0.06 // \$15 // \$2 /s \$8 \$20 \$12,000	page report	\$ \$ \$ \$	30.00 - 16.00 40.00 2,000.00	\$ \$	14,85 28,89 4,45
Escalation - % of Labor Cost Total Salary Cost Overhead Cost @ Net Fee @ Total Overhead & Net Fee Cost Direct Expenses Reproduction Costs Copies Reports Plans Parking Mail/Deliveries/Fed Ex Drilling Subcontractor Traffic Control Signage Rental	3% 194.47% (30.0% (No. 0 2 0 2	Unit pages @ reports @ sets @ @ @	Fach \$0.06 / \$15 / \$2 / \$8 \$20 \$12,000 \$300	page report	\$ \$ \$ \$	30.00 - 16.00 40.00 2,000.00 300.00	\$ \$	14,85 28,89 4,45
Escalation - % of Labor Cost Total Salary Cost Overhead Cost @ Net Fee @ Total Overhead & Net Fee Cost Direct Expenses Reproduction Costs Copies Reports Plans Parking Mail/Deliveries/Fed Ex Drilling Subcontractor	3% 194.47% (30.0% (No. 0 2 0 2 2 1	Unit pages @ reports @ sets @ @ @ @	Fach \$0.06 // \$15 // \$2 /s \$8 \$20 \$12,000	page report	\$ \$ \$ \$ \$	30.00 - 16.00 40.00 2,000.00	\$ \$	14,85 28,89 4,45
Escalation - % of Labor Cost Total Salary Cost Overhead Cost @ Net Fee @ Total Overhead & Net Fee Cost Direct Expenses Reproduction Costs Copies Reports Plans Parking Mail/Deliveries/Fed Ex Drilling Subcontractor Traffic Control Signage Rental	3% 194.47% (30.0% (No. 0 2 0 2 2 1 1	Unit pages @ reports @ sets @ @ @ @ @	Fach \$0.06 / \$15 / \$2 / \$8 \$20 \$12,000 \$300	page report	\$ \$ \$ \$ \$ \$ \$ \$	30.00 - 16.00 40.00 2,000.00 300.00	\$ \$	14,85 28,89 4,45
Escalation - % of Labor Cost Total Salary Cost Overhead Cost @ Net Fee @ Total Overhead & Net Fee Cost Direct Expenses Reproduction Costs Copies Reports Plans Parking Mail/Deliveries/Fed Ex Drilling Subcontractor Traffic Control Signage Rental Field Expenses (Sample Bags, Cold	3% 194.47% (30.0% (No. 0 2 0 2 1 1 1 1	Unit pages @ reports @ sets @ @ @ @ @ @	Fach \$0.06 /1 \$15 /1 \$2 /5 \$8 \$20 \$12,000 \$300 \$150	page report set	\$ \$ \$ \$ \$ \$ \$ \$	30.00 - 16.00 40.00 2,000.00 300.00 150.00	\$ \$	14,85 28,89 4,45

65,493

\$

	City of Tukwila South Boeing Access Road over Airport Way Seismic Retrofit												
	HWA GeoSciences, Inc.	1	2	3	7	8	10	12	13	18			
Work Element #	Work Element	Administrative Support	CAD (\$38.00	Contracts Administrator	VI 1signogist IV	V Geologist V	Geotechnical Engineer I	Geotechnical Engineer IV	Geotechnical Engineer VI	XI Principal IX	HWA GeoSciences, Inc.	HWA GeoSciences, Inc.	% of
		Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total
		hrs	hrs	hrs	hrs	hrs	hrs	hrs	hrs	hrs	hrs	\$	Hours
3.0	Geotechnical Engineering and Technical Memo												
3.0	Geotechnical Engineering and Technical Memo												
3.1.1	Project Setup		1	2	6		1	2	1		10	\$1,271	2.94%
3.1.2	Attend Project Kickoff Meeting				Ŭ		4	4			8	\$1,079	2.35%
3.1.3	Collect and Review Available Geotechnical Data						5	1			6	\$736	1.76%
3.1.4	Plan Field Exploration Program						4	2			6	\$772	1.76%
3.1.5	Generate Geotechnical Exploration Work Plan Memo		2				6	2			10	\$1,260	2.94%
3.1.6	Conduct Utility Locates and Slope Reconnaissance						10	6			16	\$2,085	4.71%
3.1.7	Conduct Geotechnical Borings						30	2			32	\$3,800	9.41%
3.1.8	Generate Boring Logs and Assign Lab Testing					2	6	2			10	\$1,273	2.94%
3.1.9	Evaluate Field and Laboratory Data					4	6				10	\$1,234	2.94%
3.1.10	Develop Geologic Profile		5			2	4	2			13	\$1,677	3.82%
3.1.11	Generate Seismic Design Parameters						4		2		6	\$883	1.76%
3.1.12	Evaluate Geologic Hazards						16	4	2		22	\$2,894	6.47%
3.1.13	Evaluate Potential for Liquefaction						8	2	2		12	\$1,655	3.53%
3.1.14	Evaluate Abutment Earth Pressures		4				5	2	1		12	\$1,607	3.53%
3.1.15	Perform Geotechnical Foundation Resistance Assessment			-			20	8	4	1	33	\$4,669	9.71% 2.35%
3.1.16	Project Coordination Meetings			-		4	4	4	0	4	8	\$1,079	2.35% 4.71%
3.1.17 3.1.18	HWA Geotechnical QA/QC Propage Draft Geotechnical Engineering Mome	1	4			4	12	8	8	4	16 33	\$3,319 \$4,872	9.71%
3.1.18	Prepare Draft Geotechnical Engineering Memo Respond to City of Tukwila and Design Team Comments	-	4				12	4	4		33 8	\$4,872 \$1,448	2.35%
3.1.19	Miscellaneous Geotechnical Analysis						5	10	5		8 20	\$1,448 \$3,159	5.88%
3.1.21	Finalize Geotechnical report	1					6	8	4		19	\$2,839	5.59%
3.1.22	Geotechnical Task Management						U	30	7		30	\$4,602	8.82%
0.1.22	Coolooniiloai Taok Managonionk							- 00			00	ψ+,002	0.02.1
	Work Element 3.0 Total	2	15	2	6	14	155	103	36	7	340	\$48,212	100.00%
	EXPENSES			-								£47.004	
	SALARY ESCALATION											\$17,281	
DPOIECT	WORK ELEMENTS TOTALS	2	15	2	6	14	155	103	36	7	340	\$65,493	100.00%



Transportation Building 310 Maple Park Avenue S.E. P.O. Box 47300 Olympia, WA 98504-7300 360-705-7000 TTY: 1-800-833-6388 www.wsdot.wa.gov

June 5, 2018

HWA GeoSciences, Inc. 21312 30 th Drive SE, Suite 110 Bothell, WA 98021

Subject: Acceptance FYE 2017 ICR – CPA Report

Dear Vasiliy Babko:

We have accepted your firms FYE 2017 Indirect Cost Rate (ICR) of 194.47% (rate includes 0.35% Facilities Capital Cost of Money) based on the "Independent CPA Report," prepared by T. Wayne Owens & Associates. This rate will be applicable for WSDOT Agreements and Local Agency Contracts in Washington only. This rate may be subject to additional review if considered necessary by WSDOT. Your ICR must be updated on an annual basis.

Costs billed to agreements/contracts will still be subject to audit of actual costs, based on the terms and conditions of the respective agreement/contract.

This was not a cognizant review. Any other entity contracting with the firm is responsible for determining the acceptability of the ICR.

If you have any questions, feel free to contact our office at (360) 705-7019 or via email consultantrates@wsdot.wa.gov.

Regards;

Jonson, Erik Jun 6 2018 3:24 PM

ERIK K. JONSON

Manager, Consultant Services Office

EKJ:rck

HWA GEOSCIENCES INC.

2018 NTE HOURLY RATES BY CATEGORY

	NTE			
TITLE	HOURLY	Overhead	Fixed Fee	Billing
	RATE	1.9447	30.00%	Rate
Administrative Support	\$23.00	\$44.73	\$6.90	\$74.64
CAD	\$38.00	\$73.90	\$11.40	\$123.31
Contracts Administrator	\$34.00	\$66.12	\$10.20	\$110.33
Geologist I	\$25.00	\$48.62	\$7.50	\$81.13
Geologist II	\$28.75	\$55.91	\$8.63	\$93.30
Geologist III	\$33.00	\$64.18	\$9.90	\$107.09
Geologist IV	\$36.50	\$70.98	\$10.95	\$118.44
Geologist V	\$40.00	\$77.79	\$12.00	\$129.80
Geologist VII	\$64.00	\$124.46	\$19.20	\$207.67
Geotechnical Engineer I	\$34.61	\$67.31	\$10.38	\$112.31
Geotechnical Engineer II	\$36.00	\$70.01	\$10.80	\$116.82
Geotechnical Engineer IV	\$46.00	\$89.46	\$13.80	\$149.27
Geotechnical Engineer VI	\$63.00	\$122.52	\$18.90	\$204.43
Hydrogeologist VI	\$40.00	\$77.79	\$12.00	\$129.80
Lab/Field Technician I	\$21.50	\$41.81	\$6.45	\$69.77
Lab/Field Technician II	\$28.00	\$54.45	\$8.40	\$90.86
Lab/Field Technician III	\$35.00	\$68.06	\$10.50	\$113.57
Principal IX	\$84.62	* \$164.56	\$25.39	\$274.58
Principal VIII	\$76.00	\$147.80	\$22.80	\$246.61

City of Tukwila South Boeing Access Road over Airport Way Seismic Retrofit

Landau	

					Direct		
Classification			Hrs.	Х	Rate	=	Cost
Senior Associate			34		\$ 53.70		\$1,826
Senior Associate			3		\$ 54.33		\$163
Project			24		\$ 29.81		\$715
Project Coordinator			4		\$ 26.50		\$106
Project Coordinator			4		\$ 30.76		\$123
CAD/GIS Technician			8		\$ 30.00		\$240
			0				\$0
		Total Hrs.	77				
Salary Cost						\$	3,173
Salary Escalation Cost (estimated)							
Escalation - % of Labor Cost	3%	per year @	1 y	/ear(s)			\$95
Total Salary Cost						\$	3,268
Overhead Cost @	212.53%	of Direct Labor				\$	6,946
Net Fee @		of Direct Labor					981
Total Overhead & Net Fee Cost						<u>\$</u>	7,927
Direct Expenses	No.	Unit	Each		Cost		
Reproduction Costs							
Plans		sets @	\$20 /	set	\$ -		
Mail/Deliveries/Fed Ex		@	\$20		\$ -		
Subtotal						\$	
Landau Associates, Inc. Tota						\$	11,195

City of Tukwila South Boeing Access Road over Airport Way Seismic Retrofit Landau Associates, Inc. Landau Associates, Inc. Landau Associates, Inc. CAD/GIS Technician Project Coordinator Project Coordinator Senior Associate Senior Associate Work Element # **Work Element** % of direct rate Total Total Total hrs hrs Hours 4.00 Environmental 10.39% Kick-Off Meeting and Coordination with WSDOT 4.1 8 8 \$1,50 33.77% 26 4.2 Environmental Evaluation, Field Work and Documentation 2 16 8 \$2,93 Pre-Application Meeting and Coordination with Tukwila 10.39% 4.3 8 8 \$1,50 45.45% 4.4 SEPA/NEPA Documentation 16 3 8 4 4 \$5,25 Total Task 4 24 100.00% 77 \$11,195 **EXPENSES** SALARY ESCALATION **PROJECT WORK ELEMENTS TOTALS** 34 \$11,195 100.00% 3 24 4 4 8



Transportation Building 310 Maple Park Avenue S.E. P.O. Box 47300 Olympia, WA 98504-7300 360-705-7000 TTY: 1-800-833-6388 www.wsdot.wa.gov

November 13, 2017

Landau Associates, Inc. 130 - 2nd Avenue South Edmonds, WA 98020

Subject: Acceptance FYE 2017 ICR – CPA Report

Dear Mr. Dennis Hobbs:

We have accepted your firms FYE 2017 Indirect Cost Rate (ICR) of 212.53% based on the "Independent CPA Report," prepared by T. Wayne Owens, CPA. This rate will be applicable for WSDOT Agreements and Local Agency Contracts in Washington only. This rate may be subject to additional review if considered necessary by WSDOT. Your ICR must be updated on an annual basis.

Costs billed to agreements/contracts will still be subject to audit of actual costs, based on the terms and conditions of the respective agreement/contract.

This was not a cognizant review. Any other entity contracting with the firm is responsible for determining the acceptability of the ICR.

If you have any questions, feel free to contact our office at (360) 705-7019 or via email consultantrates@wsdot.wa.gov.

Regards;

ERIK K. JONSON Manager, Consultant Services Office

EKJ:kms

Landau Associates Labor Breakdown 2018 Min / Max Table

Salaries as of July 01, 2018

Job Classification	Direct I Rate R		Indirect (OH 212		Professio (30°		All Inclusive Hourly Billing Rate		
	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	
Principal	\$62.50	\$84.62	\$132.83	\$179.84	\$18.75	\$25.39	\$214.08	\$289.85	
Senior Associate	\$49.52	\$62.50	\$105.24	\$132.83	\$14.86	\$18.75	\$169.62	\$214.08	
Associate	\$44.23	\$50.96	\$94.00	\$108.31	\$13.27	\$15.29	\$151.50	\$174.55	
Senior	\$37.50	\$50.00	\$79.70	\$106.27	\$11.25	\$15.00	\$128.45	\$171.27	
Senior Project	\$32.21	\$39.90	\$68.46	\$84.80	\$9.66	\$11.97	\$110.33	\$136.67	
Project	\$28.00	\$36.06	\$59.51	\$76.64	\$8.40	\$10.82	\$95.91	\$123.52	
Senior Staff / CAD Designer	\$26.20	\$37.50	\$55.68	\$79.70	\$7.86	\$11.25	\$89.74	\$128.45	
Staff / Senior Technician II	\$22.60	\$35.24	\$48.03	\$74.90	\$6.78	\$10.57	\$77.41	\$120.71	
Data Specialist	\$32.50	\$32.50	\$69.07	\$69.07	\$9.75	\$9.75	\$111.32	\$111.32	
CAD / GIS Technician	\$30.00	\$36.06	\$63.76	\$76.64	\$9.00	\$10.82	\$102.76	\$123.52	
Project Coordinator	\$26.39	\$32.50	\$56.09	\$69.07	\$7.92	\$9.75	\$90.39	\$111.32	
Assistant / Senior Technician I	\$20.00	\$20.00	\$42.51	\$42.51	\$6.00	\$6.00	\$68.51	\$68.51	
Support Staff	\$20.50	\$24.79	\$43.57	\$52.69	\$6.15	\$7.44	\$70.22	\$84.91	

City of Tukwila South Boeing Access Road over Airport Way Seismic Retrofit

1 Alliance

						Direct		
Classification			Hrs.	. x		Rate	=	Cost
Admin			0		\$	27.00		\$(
Principal Surveyor			5	;	\$	84.00		\$420
Sr. Project Manager			22) -	\$	54.00		\$1,188
Project Manager			0)	\$	52.00		\$0
Assistant Project Manager			4		\$	31.00		\$124
Tech 1			40		\$	24.00		\$960
Tech 2			0		\$	27.00		\$0
Tech 3			40		\$	32.00		\$1,280
Tech 4			0		\$	36.00		. \$0
Tech 5			40		\$	41.00		\$1,640
Controller			0		\$	44.00		\$(
C00			0		\$	73.00		\$0
Survey Tech	_		52		\$	41.29		\$2,147
		Total Hrs.	203	}				
Salary Cost							\$	7,759
Salary Escalation Cost (estimated)								
Escalation - % of Labor Cost	0%	per year @	0	year(s)				\$0
Total Salary Cost		1 7 0		, ()			\$	7,759
Overhead Cost @		of Direct Labor					\$	12,22
Net Fee @	29.0%	of Direct Labor					<u>\$</u> \$	2,250
Total Overhead & Net Fee Cost							\$	14,475
Direct Expenses	No.	Unit	Each			Cost		
Reproduction Costs								
Copies	0	pages @		/page	\$	-		
Reports	0	reports @		/report	\$	-		
Plans	0	sets @	\$2	/set	\$	-		
Parking	0	@	\$8		\$	-		
Mail/Deliveries/Fed Ex	0	@	\$20	,	\$	-		
Mileage	200	miles @	\$0.545	/mile	\$	109.00		
Utility Location Service	1		\$2,000		\$	2,000.00		
Scanner Rental		2-day rental @				3,200.00		
Traffic Control	5	days @	\$4,250.00		\$3	21,250.00		
Subtotal							\$	26,559
1 Alliance Total							\$	48,793

	Subconsultant Cost Computations										
) South Boeing Access Ro		Tukwi ver Air		Nav S	eismi	c Reti	ofit			
			0. 7	port.	··u, ·	0.0	• 1101.	•			
	1 Alliance	2	3	5	6	8	10	13			
Work Element#	hroipal Surveyor Project Manager Sistant Project Manager ch 1 ch 3 ch 3 ch 5 ch 5 Alliance										
	ullettrates.	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total
		hrs	hrs	hrs	hrs	hrs	hrs	hrs	hrs	\$	Hours
6.00	O Manada a										
6.1	Survey Mapping Geodetic and Cadastral Survey Control	\vdash									
6.2	Utility Location Service		4	1	8	8	8	4	33	\$3,405	
6.3	Mapping			•	Ŭ			•	00	ψ0,400	
6.4	Right-of-Way and Property Lines	4	16	2	32	32	32	40	158	\$17,244	
	Work Element 6.0 Total	5	22	4	40	40	40	52	203	\$22,234	100.00%
	EXPENSES SALARY ESCALATION									\$26,559	
				_						4	
PROJECT	WORK ELEMENTS TOTALS	5	22	4	40	40	40	52	203	\$48,793	50.00°

October 15, 2018

WSP USA Inc. 999 Third Avenue, Suite 3200 Seattle, WA 98104

Subject: Acceptance Sub-Consultant's Annual ANTE Rate Table

1 Alliance Geomatics

Dear Ms. Patty Chapman:

Washington State Department of Transportation (WSDOT) has reviewed and accepted your sub-consultant's proposed Annual ANTE rate table for Agreement Number Y-11918 effective July 1, 2018. This acceptance is in accordance with the terms of your agreement with WSDOT.

This Annual ANTE rate table may be subject to additional review if considered necessary by WSDOT.

If you have any questions, feel free to contact our office at (360) 705-7019 or via email consultantrates@wsdot.wa.gov.

Regards,

ERIK K. JONSON Manager, Consultant Services Office

EKJ:rck

Enclosure: Sub-Consultant's Accepted Annual ANTE Rate Table

Cc: Roscoe Ames

Actuals Not To Exceed Table (ANTE)

1 Alliance Geomatics Survey & Mapping 1261A - 120th Ave NE Bellevue, WA 98005 Y-11918 All Inclusive Direct Overhead Fixed Fee NTE* Job Classifications NTE **Hourly Billng** Labor Rate NTE* Rate NTE 157.56% 29.00% \$27.00 \$42.54 \$7.83 \$77.37 Admin Principal Surveyor \$84.00 \$132.35 \$24.36 \$240.71 Sr. Project Manager \$54.00 \$85.08 \$15.66 \$154.74 \$52.00 \$81.93 \$15.08 Project Manager \$149.01 Assistant Project Manager \$31.00 \$48.84 \$8.99 \$88.83 \$37.81 \$24.00 \$6.96 Tech 1 \$68.77 Tech 2 \$27.00 \$42.54 \$7.83 \$77.37 Tech 3 \$32.00 \$50.42 \$9.28 \$91.70 Tech 4 \$36.00 \$56.72 \$10.44 \$103.16 Tech 5 \$11.89 \$117.49 \$41.00 \$64.60 Controller \$44.00 \$69.33 \$12.76 \$126.09 COO \$73.00 \$115.02 \$209.19 \$21.17

\$41.29

Survey Tech

\$65.06

\$11.97

\$118.32

During the performance of this AGREEMENT, the CONSULTANT, for itself, its assignees, and successors in interest agrees as follows:

- 1. Compliance with Regulations: The CONSULTANT shall comply with the Regulations relative to non-discrimination in federally assisted programs of the AGENCY, Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the "REGULATIONS"), which are herein incorporated by reference and made a part of this AGREEMENT.
- 2. Non-discrimination: The CONSULTANT, with regard to the work performed during this AGREEMENT, shall not discriminate on the grounds of race, color, sex, or national origin in the selection and retention of sub-consultants, including procurement of materials and leases of equipment. The CONSULTANT shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the REGULATIONS, including employment practices when this AGREEMENT covers a program set forth in Appendix B of the REGULATIONS.
- 3. Solicitations for Sub-consultants, Including Procurement of Materials and Equipment: In all solicitations either by competitive bidding or negotiations made by the CONSULTANT for work to be performed under a sub-contract, including procurement of materials or leases of equipment, each potential sub-consultant or supplier shall be notified by the CONSULTANT of the CONSULTANT's obligations under this AGREEMENT and the REGULATIONS relative to non-discrimination on the grounds of race, color, sex, or national origin.
- 4. Information and Reports: The CONSULTANT shall provide all information and reports required by the REGULATIONS or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the AGENCY, the STATE, or the Federal Highway Administration (FHWA) to be pertinent to ascertain compliance with such REGULATIONS, orders and instructions. Where any information required of a CONSULTANT is in the exclusive possession of another who fails or refuses to furnish this information, the CONSULTANT shall so certify to the AGENCY, the STATE, or the FHWA as appropriate, and shall set forth what efforts it has made to obtain the information.
- 5. Sanctions for Non-compliance: In the event of the CONSULTANT's non-compliance with the non-discrimination provisions of this AGREEMENT, the AGENCY shall impose such AGREEMENT sanctions as it, the STATE, or the FHWA may determine to be appropriate, including, but not limited to:
 - Withholding of payments to the CONSULTANT under this AGREEMENT until the CONSULTANT complies, and/or;
 - Cancellation, termination, or suspension of this AGREEMENT, in whole or in part.
- 6. Incorporation of Provisions: The CONSULTANT shall include the provisions of paragraphs (1) through (5) in every subcontract, including procurement of materials and leases of equipment, unless exempt by the REGULATIONS, or directives issued pursuant thereto. The CONSULTANT shall take such action with respect to any sub-consultant or procurement as the STATE, the AGENCY, or FHWA may direct as a means of enforcing such provisions including sanctions for non-compliance.

Provided, however, that in the event a CONSULTANT becomes involved in, or is threatened with, litigation with a sub-consultant or supplier as a result of such direction, the CONSULTANT may request the AGENCY enter into such litigation to protect the interests of the STATE and/or the AGENCY and, in addition, the CONSULTANT may request the United States enter into such litigation to protect the interests of the United States.

Agreement Number:

Exhibit G Certification Documents

Exhibit G-1(a)	Certification of Consultant
Exhibit G-1(b)	Certification of City of Tukwila
Exhibit G-2	Certification Regarding Debarment, Suspension and Other Responsibility Matters Primary Covered Transactions
Exhibit G-3	Certification Regarding the Restrictions of the Use of Federal Funds for Lobbying
Exhibit G-4	Certificate of Current Cost or Pricing Data

Exhibit G-1(a) Certification of Consultant

I hereby certify that I am the and duly authorized representative of the firm of

whose address is

and that neither the above firm nor I have:

- a) Employed or retained for a commission, percentage, brokerage, contingent fee, or other consideration, any firm or person (other than a bona fide employee working solely for me or the above CONSULTANT) to solicit or secure this AGREEMENT;
- b) Agreed, as an express or implied condition for obtaining this contract, to employ or retain the services of any firm or person in connection with carrying out this AGREEMENT; or
- c) Paid, or agreed to pay, to any firm, organization or person (other than a bona fide employee working solely for me or the above CONSULTANT) any fee, contribution, donation, or consideration of any kind for, or in connection with, procuring or carrying out this AGREEMENT; except as hereby expressly stated (if any);

I acknowledge that this certificate is to be furnished to the and the Federal Highway Administration, U.S. Department of Transportation in connection with this AGREEMENT involving participation of Federal-aid highway funds, and is subject to applicable State and Federal laws, both criminal and civil.

Consultant (Firm Name)		
Signature (Authorized Official of Consultant)	 Date	

Exhibit G-1(b) Certification of							
I hereby certify that I am the:							
Other							
of the or its representative has not been required, direct with obtaining or carrying out this AGREEMEN	, and etly or indirectly as an express or implied condition in connection NT to:						
a) Employ or retain, or agree to employ to retain, any firm or person; or							
b) Pay, or agree to pay, to any firm, person, or organization, any fee, contribution, donation, or consideration of any kind; except as hereby expressly stated (if any):							
	shed to the Department of Transportation, in connection with this ral-aid highway funds, and is subject to applicable State and						
Signature	 Date						
	Agreement Number:						

Exhibit G-2 Certification Regarding Debarment, Suspension and Other Responsibility Matters - Primary Covered Transactions

- I. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - A. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - B. Have not within a three (3) year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State anti-trust statues or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - C. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - D. Have not within a three (3) year period preceding this application / proposal had one or more public transactions (Federal, State and local) terminated for cause or default.
- II. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Consultant (Firm Name)		
Signature (Authorized Official of Consultant)	 Date	
	Agreement Number:	

Exhibit G-3 Certification Regarding the Restrictions of the Use of Federal Funds for Lobbying

The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

- 1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or any employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative AGREEMENT, and the extension, continuation, renewal, amendment, or modification of Federal contract, grant, loan or cooperative AGREEMENT.
- 2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan or cooperative AGREEMENT, the undersigned shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000.00, and not more than \$100,000.00, for each such failure.

The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier sub-contracts, which exceed \$100,000, and that all such sub-recipients shall certify and disclose accordingly.

Consultant (Firm Name)	
Signature (Authorized Official of Consultant)	Date
	Agreement Number:

Exhibit G-4 Certificate of Current Cost or Pricing Data

Exhibit G-4 Certificate of Current Cost of	Fricing Data
This is to certify that, to the best of my knowledge and belie 2.101 of the Federal Acquisition Regulation (FAR) and requirements actually or by specific identification in writing, to the representative in support of as of **.	uired under FAR subsection 15.403-4) submitted,
This certification includes the cost or pricing data supporting rate AGREEMENT's between the offer or and the Government of the Covernment	
Firm:	
Signature	Title
Date of Execution***:	

^{*}Identify the proposal, quotation, request for pricing adjustment, or other submission involved, giving the appropriate identifying number (e.g. project title.)

^{**}Insert the day, month, and year, when price negotiations were concluded and price AGREEMENT was reached.

^{***}Insert the day, month, and year, of signing, which should be as close as practicable to the date when the price negotiations were concluded and the contract price was agreed to.

To Be Used Only If Insurance Requirements Are Increased

The professional liability limit of the CONSULTANT to the AGENCY identified in Section XII, Legal Relations and Insurance of this Agreement is amended to \$

The CONSULTANT shall provide Professional Liability insurance with minimum per occurrence limits in the amount of \$

Such insurance coverage shall be evidenced by one of the following methods:

- Certificate of Insurance
- Self-insurance through an irrevocable Letter of Credit from a qualified financial institution.

Self-insurance through documentation of a separate fund established exclusively for the payment of professional liability claims, including claim amounts already reserved against the fund, safeguards established for payment from the fund, a copy of the latest annual financial statements, and disclosure of the investment portfolio for those funds

Should the minimum Professional Liability insurance limit required by the AGENCY as specified above exceed \$1 million per occurrence or the value of the contract, whichever is greater, then justification shall be submitted to the Federal Highway Administration (FHWA) for approval to increase the minimum insurance limit.

If FHWA approval is obtained, the AGENCY may, at its own cost, reimburse the CONSULTANT for the additional professional liability insurance required.

Notes: Cost of added insurance requirements: \$

- Include all costs, fee increase, premiums.
- This cost shall not be billed against an FHWA funded project.
- For final contracts, include this exhibit.

Alleged Consultant Design Error Procedures

The purpose of this exhibit is to establish a procedure to determine if a consultant's alleged design error is of a nature that exceeds the accepted standard of care. In addition, it will establish a uniform method for the resolution and/or cost recovery procedures in those instances where the agency believes it has suffered some material damage due to the alleged error by the consultant.

Step 1 Potential Consultant Design Error(s) is Identified by Agency's Project Manager

At the first indication of potential consultant design error(s), the first step in the process is for the Agency's project manager to notify the Director of Public Works or Agency Engineer regarding the potential design error(s). For federally funded projects, the Region Local Programs Engineer should be informed and involved in these procedures. (Note: The Director of Public Works or Agency Engineer may appoint an agency staff person other than the project manager, who has not been as directly involved in the project, to be responsible for the remaining steps in these procedures.)

Step 2 Project Manager Documents the Alleged Consultant Design Error(s)

After discussion of the alleged design error(s) and the magnitude of the alleged error(s), and with the Director of Public Works or Agency Engineer's concurrence, the project manager obtains more detailed documentation than is normally required on the project. Examples include: all decisions and descriptions of work; photographs, records of labor, materials and equipment.

Step 3 Contact the Consultant Regarding the Alleged Design Error(s)

If it is determined that there is a need to proceed further, the next step in the process is for the project manager to contact the consultant regarding the alleged design error(s) and the magnitude of the alleged error(s). The project manager and other appropriate agency staff should represent the agency and the consultant should be represented by their project manager and any personnel (including sub-consultants) deemed appropriate for the alleged design error(s) issue.

Step 4 Attempt to Resolve Alleged Design Error with Consultant

After the meeting(s) with the consultant have been completed regarding the consultant's alleged design error(s), there are three possible scenarios:

- It is determined via mutual agreement that there is not a consultant design error(s). If this is the case, then the process will not proceed beyond this point.
- It is determined via mutual agreement that a consultant design error(s) occurred. If this is the case, then the Director of Public Works or Agency Engineer, or their representatives, negotiate a settlement with the consultant. The settlement would be paid to the agency or the amount would be reduced from the consultant's agreement with the agency for the services on the project in which the design error took place. The agency is to provide LP, through the Region Local Programs Engineer, a summary of the settlement for review and to make adjustments, if any, as to how the settlement affects federal reimbursements. No further action is required.
- There is not a mutual agreement regarding the alleged consultant design error(s). The consultant may request that the alleged design error(s) issue be forwarded to the Director of Public Works or Agency Engineer for review. If the Director of Public Works or Agency Engineer, after review with their legal counsel, is not able to reach mutual agreement with the consultant, proceed to Step 5.

Step 5 Forward Documents to Local Programs

For federally funded projects all available information, including costs, should be forwarded through the Region Local Programs Engineer to LP for their review and consultation with the FHWA. LP will meet with representatives of the agency and the consultant to review the alleged design error(s), and attempt to find a resolution to the issue. If necessary, LP will request assistance from the Attorney General's Office for legal interpretation. LP will also identify how the alleged error(s) affects eligibility of project costs for federal reimbursement.

- If mutual agreement is reached, the agency and consultant adjust the scope of work and costs to reflect the agreed upon resolution. LP, in consultation with FHWA, will identify the amount of federal participation in the agreed upon resolution of the issue.
- If mutual agreement is not reached, the agency and consultant may seek settlement by arbitration or by litigation.

The purpose of this exhibit is to describe a procedure regarding claim(s) on a consultant agreement. The following procedures should only be utilized on consultant claims greater than \$1,000. If the consultant's claim(s) are a total of \$1,000 or less, it would not be cost effective to proceed through the outlined steps. It is suggested that the Director of Public Works or Agency Engineer negotiate a fair and reasonable price for the consultant's claim(s) that total \$1,000 or less.

This exhibit will outline the procedures to be followed by the consultant and the agency to consider a potential claim by the consultant.

Step 1 Consultant Files a Claim with the Agency Project Manager

If the consultant determines that they were requested to perform additional services that were outside of the agreement's scope of work, they may be entitled to a claim. The first step that must be completed is the request for consideration of the claim to the Agency's project manager.

The consultant's claim must outline the following:

- Summation of hours by classification for each firm that is included in the claim;
- Any correspondence that directed the consultant to perform the additional work;
- Timeframe of the additional work that was outside of the project scope;
- Summary of direct labor dollars, overhead costs, profit and reimbursable costs associated with the additional work; and
- Explanation as to why the consultant believes the additional work was outside of the agreement scope of work.

Step 2 Review by Agency Personnel Regarding the Consultant's Claim for Additional Compensation

After the consultant has completed step 1, the next step in the process is to forward the request to the Agency's project manager. The project manager will review the consultant's claim and will met with the Director of Public Works or Agency Engineer to determine if the Agency agrees with the claim. If the FHWA is participating in the project's funding, forward a copy of the consultant's claim and the Agency's recommendation for federal participation in the claim to the WSDOT Local Programs through the Region Local Programs Engineer. If the claim is not eligible for federal participation, payment will need to be from agency funds.

If the Agency project manager, Director of Public Works or Agency Engineer, WSDOT Local Programs (if applicable), and FHWA (if applicable) agree with the consultant's claim, send a request memo, including backup documentation to the consultant to either supplement the agreement, or create a new agreement for the claim. After the request has been approved, the Agency shall write the supplement and/or new agreement and pay the consultant the amount of the claim. Inform the consultant that the final payment for the agreement is subject to audit. No further action in needed regarding the claim procedures.

If the Agency does not agree with the consultant's claim, proceed to step 3 of the procedures.

Step 3 Preparation of Support Documentation Regarding Consultant's Claim(s)

If the Agency does not agree with the consultant's claim, the project manager shall prepare a summary for the Director of Public Works or Agency Engineer that included the following:

- Copy of information supplied by the consultant regarding the claim;
- Agency's summation of hours by classification for each firm that should be included in the claim;
- Any correspondence that directed the consultant to perform the additional work;
- Agency's summary of direct labor dollars, overhead costs, profit and reimbursable costs associated with the additional work;
- Explanation regarding those areas in which the Agency does/does not agree with the consultant's claim(s);
- Explanation to describe what has been instituted to preclude future consultant claim(s); and
- Recommendations to resolve the claim.

Step 4 Director of Public Works or Agency Engineer Reviews Consultant Claim and Agency Documentation

The Director of Public Works or Agency Engineer shall review and administratively approve or disapprove the claim, or portions thereof, which may include getting Agency Council or Commission approval (as appropriate to agency dispute resolution procedures). If the project involves federal participation, obtain concurrence from WSDOT Local Programs and FHWA regarding final settlement of the claim. If the claim is not eligible for federal participation, payment will need to be from agency funds.

Step 5 Informing Consultant of Decision Regarding the Claim

The Director of Public Works or Agency Engineer shall notify (in writing) the consultant of their final decision regarding the consultant's claim(s). Include the final dollar amount of the accepted claim(s) and rationale utilized for the decision.

Step 6 Preparation of Supplement or New Agreement for the Consultant's Claim(s)

The agency shall write the supplement and/or new agreement and pay the consultant the amount of the claim. Inform the consultant that the final payment for the agreement is subject to audit.