



INFORMATIONAL MEMORANDUM

TO: **Transportation and Infrastructure Committee**
FROM: **Hari Ponnekanti, Interim Public Works Director**
BY: **Cyndy Knighton, Senior Program Manager**
CC: **Mayor Ekberg**
DATE: **October 2, 2020**
SUBJECT: **West Valley Highway (I-405 – Strander Boulevard)**
Project No. 99310410, Contract No. 19-095
Supplemental Agreement No. 1

ISSUE

Approve Supplemental Agreement No. 1 with TranTech Engineering for the design of the West Valley Highway (I-405 – Strander Boulevard) Project.

BACKGROUND

Since September 2019, TranTech Engineering has been working on the design of the West Valley Highway project, which also includes improvements along Longacres Way from West Valley Highway to the Tukwila Station. The design is currently at the 60% level and is proceeding toward final design. The project has funding for the design and construction from three grant sources: Transportation Improvement Board, CMAQ, and System Access Funds. The project is also on the Traffic Impact Fee list.

DISCUSSION

As the design has progressed, needs for additional design funds were discovered. The attached Supplemental Agreement No. 1 Summary details the specific tasks that require additional funding to complete the design. With the federal CMAQ grant funds and the fact that the project is on a State Highway, additional tasks are required by WSDOT in order to gain their approval. These tasks include the Noise Assessment and Collision Analysis Report. Additional geotechnical exploration is necessary with the design change from a wall to a “pedestrian bridge” for the sidewalk over the Seattle Public Utilities 60-inch watermain. Additional costs are needed to cover costs not included in the original scope of work for design but will result in significant savings for the project’s construction.

FINANCIAL IMPACT

Supplement No. 1 is for an increase of \$148,325 for a new total contract amount of \$680,263. Right-of-way acquisition costs are not expected with this project, so the \$100k budgeted for Land will be reallocated to Design. The remaining \$32,163 will come from reallocation of funds from the construction phase.

RECOMMENDATION

Council is being asked to approve Supplemental Agreement No. 1 to Contract No. 19-095 for \$148,325, for a total contract amount of \$680,263, with TranTech Engineering and consider this item at the October 19, 2020 Consent Agenda Regular Meeting.

ATTACHMENTS

- Proposed 2021 CIP, page 8
- Supplemental Agreement Summary
- Supplemental Agreement No. 1

CITY OF TUKWILA CAPITAL PROJECT SUMMARY

2021 to 2026

PROJECT: **West Valley Hwy (I-405 - Strander Blvd)** Project No. 99310410

DESCRIPTION: Design and construct completion of seven lane sections of West Valley Hwy with curbs, gutters, storm drainage, lighting and traffic control, and a pedestrian activated signal near the Southcenter Pedestrian Bridge.
Shared use path on west side of West Valley Highway from the pedestrian bridge to Longacres Way S.

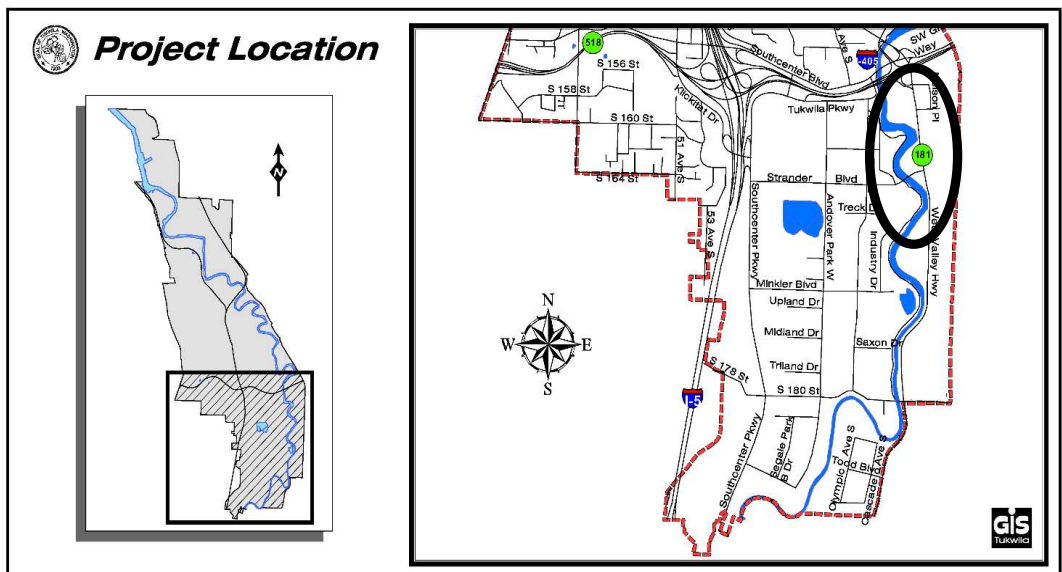
JUSTIFICATION: Safety and capacity items need completion. Portions have been completed by development.

STATUS: Combined with W Valley Hwy/S 156th Intersection in 2017. Continuing to work with development. Grant funding obtained for design and construction of West Valley Highway section. No funding for construction Longacres Way identified yet.

MAINT. IMPACT: Reduced maintenance.

COMMENT: Project is on Traffic Impact Fee List. Grants from Federal CMAQ awarded for \$628k that includes \$112k for design of sidewalk/bike path on Longacres Way (S 158th St) and State Transportation Improvement Board grant of \$2.4m for 2018/2020.

FINANCIAL (in \$000's)	Through Estimated									TOTAL	
	2019	2020	2021	2022	2023	2024	2025	2026	BEYOND		
EXPENSES											
Design	130	418									548
Land (R/W)	9	91									100
Const. Mgmt.			430								430
Construction			2,765								2,765
TOTAL EXPENSES	139	509	3,195	0	0	0	0	0	0	0	3,843
FUND SOURCES											
Awarded TIB Grant	14	160	2,260								2,434
Awarded CMAQ Grant	89	96									185
Mitigation											0
Traffic Impact Fees	577		303								880
City Oper. Revenue	(541)	253	632	0	0	0	0	0	0	0	344
TOTAL SOURCES	139	509	3,195	0	0	0	0	0	0	0	3,843





Supplemental Agreement Number _____		Organization and Address	
Original Agreement Number		Phone:	
Project Number	Execution Date	Completion Date	
Project Title	New Maximum Amount Payable		
Description of Work			

The Local Agency of _____ desires to supplement the agreement entered in to with _____ and executed on _____ and identified as Agreement No. _____

All provisions in the basic agreement remain in effect except as expressly modified by this supplement. The changes to the agreement are described as follows:

I

Section 1, SCOPE OF WORK, is hereby changed to read:

II

Section IV, TIME FOR BEGINNING AND COMPLETION, is amended to change the number of calendar days for completion of the work to read: _____

III

Section V, PAYMENT, shall be amended as follows:

as set forth in the attached Exhibit A, and by this reference made a part of this supplement.

If you concur with this supplement and agree to the changes as stated above, please sign in the Appropriate spaces below and return to this office for final action.

By: _____ By: _____

Consultant Signature

Approving Authority Signature

Date

Exhibit "A"
Summary of Payments

	Basic Agreement	Supplement #1	Total
Direct Salary Cost			
Overhead (Including Payroll Additives)			
Direct Non-Salary Costs			
Fixed Fee			
Total			

EXHIBIT A

Supplement 01

West Valley Highway (Strander Blvd to I-405) Improvements Project

Introduction

The City of Tukwila (AGENCY) has retained TranTech Engineering, LLC (CONSULTANT) to provide a complete Contract Documents package for the West Valley Highway (Strander Blvd to I-405) Improvements (PROJECT) in Tukwila, Washington. The following describes supplement 01 to this work.

Scope of Work

1. Project Management

1.1. Project Schedule

The CONSULTANT will update the schedule in Microsoft Project to be distributed and updated to the PROJECT team and AGENCY to reflect the additional components of the work elements added.

- Update PROJECT delivery schedule and provide additional updates as changes occur. This scope assumes a total of two additional delivery schedule revisions during the duration of the PROJECT.

1.2. Subconsultant Coordination

The CONSULTANT will provide additional direction to the SUBCONSULTANTS and review of their work over the course of the PROJECT for the work added by this supplement.

- Monthly monitoring of the SUBCONSULTANT's design budget will occur over the course of the PROJECT. Status, as well as projections, will be developed.
- The CONSULTANT will monitor SUBCONSULTANT costs and budgets, and propose corrective actions, if necessary. This may include formal SCOPE and/or budget modifications.
- The CONSULTANT project manager will provide direction to the PROJECT team and conduct PROJECT coordination meetings with appropriate task leaders.

1.3. Internal Project Team Meetings and Field Visits

CONSULTANT team will meet online up to an additional 2 times during the PROJECT in addition to the original contract. This task includes hours for field visits by CONSULTANT staff. SUBCONSULTANT field visit hours are captured in their respective tasks.

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).

Task #01 Assumptions – remains the same as original contract

Task #01 Deliverables

The following will be provided for the additional tasks added by this supplement

- Meeting Agendas in electronic format (MS Word) as needed
- Meeting Minutes in electronic format (MS Word) as needed
- Monthly Invoices and Progress Reports

2. Basis of Design

The Consultant will complete additional attachments requested by WSDOT for the BOD.

Assumptions

- The CONSULTANT team will not be involved in any required City Council meetings associated with the BOD or any potential speed limit changes.

Deliverables

- Collision Analysis Report
- Design Analysis
- Mode Function Memo

3. Survey and Topographic Mapping - 1 Alliance Geomatics (1AG)

3.1. Right-of-Way, Property Lines & Easement Resolution

1AG will review and analyze 7 additional title reports for right-of-way resolution and easements. The original scope of work estimated approximately 10 title reports would be provided in order to show the existing easements along the easterly project corridor and Longacres Way. Ultimately 17 reports in total were provided by the AGENCY. 1AG will research King County on-line records and title company records for any additional recorded documents that may exist that didn’t show up in the title reports provided to resolve access and sidewalk easements along Longacres Way.

3.2. Potholing the SPU 60-inch Transmission Main

1AG will obtain quotes and manage the exploratory potholes and meet with APS Locates for ground penetrating radar work to help locate the concrete watermain sleeve on W. Valley Hwy.

4. Geotechnical Engineering-Landau Associates (LAI)

LAI will provide geotechnical engineering services to support design of the bridge and signal standard foundations for the mid-block pedestrian crossing. Work elements include:

- Prior to initiating fieldwork, LAI will coordinate the clearance of underground utilities at the proposed exploration locations. LAI will mark the locations in the field and contact the Washington Utilities Coordinating Council's "One-Call" locating service. LAI will also hire a private utility-locating service to identify conductible utilities located outside of public easements.
- LAI will explore subsurface soil and groundwater conditions at the proposed bridge abutments by advancing two borings approximately 30 feet (ft) below ground surface (bgs). The explorations will be coordinated and monitored by LAI personnel, who will also collect representative soil samples and maintain a detailed log of the subsurface conditions observed. LAI will subcontract the drill rig and operator. Upon completion of fieldwork, the boreholes will be decommissioned in accordance with the requirements in Washington Administrative Code 173-160.
- LAI will perform geotechnical laboratory testing on select samples obtained from the explorations. LAI anticipates that the testing program will include four natural moisture content determinations and four grain size-distribution analyses or Atterberg limits determinations. Samples will be retained for 30 days after submittal of the final technical memorandum. Samples will then be discarded, unless other arrangements are made.
- LAI will complete engineering analyses and develop geotechnical conclusions and recommendations to support design of the bridge and signal standard foundation.

LAI will revise its November 2019 technical memorandum to include:

- An updated site plan showing the locations of the additional subsurface explorations.
- Summary boring logs and laboratory test results.
- Additional discussion of near-surface soil and groundwater conditions along the project alignment.
- Brief discussion of liquefaction susceptibility and estimated liquefaction-induced settlement.
- Updated recommendations for earthwork and site preparation (if necessary).
- Geotechnical design recommendations for the new signal standard foundations.
- Recommendations for shallow foundation support of the bridge, including criteria for foundation subgrade preparation, engineering parameters, nominal bearing pressure, estimated foundation settlement, and lateral earth pressures acting against wing walls

Assumptions

- LAI will be provided with a project base map in AutoCAD® format.
- Fieldwork can be performed during standard business hours (i.e., no weekend, holiday, or nighttime drilling will be required).
- The exploration locations are accessible to a track-mounted, limited-access drill rig. Trees or other vegetation obscuring the exploration locations will be removed by others.

- During the field investigation, care will be taken to limit surface disturbance; where disturbance is unavoidable.
- The exploration locations can be accessed without entering Washington State Department of Transportation (WSDOT) right-of-way; a WSDOT general permit will not be required.
- Upon completion of fieldwork, drill cuttings will be spread discreetly in the vicinity of the exploration locations.
- Traffic control will not be required.
- Findings of the current study will be supplemented with subsurface data previously collected in the vicinity of the Tukwila Urban Center Pedestrian Bridge. These data will be used to evaluate soil parameters and seismic behavior of strata more than 30 ft bgs.
- Native site soils will provide suitable support for a bridge built on shallow foundations, under static conditions.
- The bridge will not be designed to resist the effects of soil liquefaction.
- If needed, pavement design will be completed at a later date under separate scope and budget.
- If needed, pilot infiltration tests will be completed at a later date under separate scope and budget.
- Chemical analysis will not be performed on soil samples obtained from the borings.

5. Environmental and Permitting Services-Landau Associates (LAI)

LAI will conduct a traffic noise assessment for the project corridor, including West Valley Highway and Longacres Way, for potential noise impacts to sensitive receivers within the project study area.

The traffic noise assessment will include the following components:

- Pre-Consultation with WSDOT
- Noise Measurements for TNM Model Validation
- Noise Assessment
- Noise Barrier Analysis
- Noise Discipline Report

Assumptions

- LAI will conduct validation modeling for up to three receptor locations, and noise modeling for no more than 10 receptor locations.
- Peak hour Existing Year, No Build, and Build Year traffic volumes will be provided to LAI.
- Will provide a letter for the City to distribute to noise sensitive receptor locations (i.e., residences, businesses, etc.) seeking permission to complete noise field measurements.
- Efforts to collect noise measurements from building interiors or balconies is not included in this scope of services.

Deliverables

- An electronic (MS Word) copy of the City-review draft noise technical report.
- An electronic (MS Word) copy of the WSDOT-review draft noise technical report.
- An electronic (Adobe PDF) copy of the final noise technical report.

6-8. No Changes

9. Stormwater Compliance and Conveyance Design

This section is not being supplemented however an error is being corrected to add the hours associated with work element 9.1 through 9.3 which were not included in the original contract. The original 9.1-9.3 are included below:

9.1. Pre-Design Record

CONSULTANT will prepare a Pre-Design Record document summarizing the various stormwater requirements associated with this project to be included in an appendix of the Stormwater Technical Information Report (TIR).

9.2. Site Assessment and Mapping

The CONSULTANT will prepare site assessment maps showing existing drainage features and drainage patterns within the WVH project corridor and any relevant adjacent properties. Work elements include;

- Create existing drainage condition maps which will illustrate existing drainage features and drainage patterns. The existing drainage condition maps will be derived from the topographic survey base map created for this PROJECT.
- Conduct site reconnaissance to verify drainage features and drainage patterns.
- Create soil map showing soil types – Natural Resources Conservation Service (NRCS) – Consultant will acquire NRCS survey maps.
- Create basin/TDA map which delineates the on-site project basin(s) and shows where the PROJECT site is relative to the overall drainage basin that it lies within. AGENCY mapping, its 2013 Stormwater Comprehensive Plan, and records to be consulted for the overall drainage basin information.
- Create change in land use area maps to identify existing and proposed impervious areas that will be used for the threshold determination in accordance with the stormwater standards.

Assumptions:

- Flow control is not required for this PROJECT given the anticipated amount of new impervious area created in both drainage basins is less than the threshold quantity.
- Water quality is not required for this project given the anticipated amount of new pollution generating impervious area created in both drainage basins is less than the threshold quantity.
- Per the AGENCY's 2013 Comprehensive Plan all of Longacres Way and the eastern half of WVH between Longacres Way and the I-405 Ramps drains to the east, away from the Green River. This creates two distinct drainage basins within the PROJECT site.
- No new outfalls at the Green River will be constructed. Existing outfalls will be connected to upstream.
- City will provide electronic GIS information on existing stormwater system that CONSULTANT will use to determine existing conditions.

Deliverables:

- Existing drainage condition maps, to be included in the appendix of the Stormwater Technical Memorandum.
- Soil map, to be included in the appendix of the Stormwater Technical Memorandum.
- Basin map, to be included in the appendix of the Stormwater Technical Memorandum.
- Change in land use area maps, to be included in the appendix of the Stormwater Technical Memorandum.

9.3. Conveyance Calculations

The Consultant will prepare preliminary storm pipe conveyance capacity calculations for new pipe segments proposed as part of the improvements. This work element includes;

- Prepare preliminary pipe sizing calculations, using full-flow conditions with the Manning equation and the Rational Method (Stormshed 3G).

Assumptions:

- Pipe conveyance calculations will not be performed for any existing pipe systems to remain or the main existing trunk line which the new on-site conveyance system will be tying into.
- There will be no upgrades to any of the existing storm drain segments that are to remain upon project completion.
- Gutter flow analysis will not be required as part of this project. Inlet spacing will be determined according to the City's design standards.

Deliverables:

- Preliminary pipe conveyance calculations, to be included in the appendix of the Stormwater Technical Memorandum.

10. Plans, Specifications, & Engineer's Opinion of Construction Cost (EEOC)

The CONSULTANT will prepare the following additional items to be included in the 90%, 100%, and final Bid Ready Contract Documents (Plans, Specifications, & Estimates) for AGENCY review, comment, approval, and advertisement. The AGENCY will compile a written response log to facilitate the CONSULTANT's tracking of all comments and for efficient inclusion in the contract documents. The CONSULTANT will maintain design documentation including design calculations. CONSULTANT will develop the following Plans all at 1"=20' plotted at full-size except for intersection and driveway details at 1"=10' plotted at full-size:

Sheet Title	Estimated Sheets	Submittal Phase				Bid Ready	Party
		30%	60%	90%	100%		
Illumination (Longacres Way)	3			X	X	X	TT
Illumination Details	1			X	X	X	TT
Landscaping, Irrigation, & Urban Design Plans	4			X	X	X	PT
Landscaping, Irrigation, & Urban Design Details	4			X	X	X	PT
Estimated # of additional Sheets	4						

Work Elements 10.3 – 10.5 of the original contract will apply for the above new sheets.

10.1.1 Landscaping and Urban Design Plans Specifications and Engineer’s Opinion of Construction Cost (PERTEET)

PERTEET will prepare final Landscaping and Urban Design Plans and Details with Specifications and Engineer’s Opinion of Construction Cost as part of the following submittal packages:

- 90% submittal
- 100% submittal
- Ad-Ready submittal

Assumptions:

- Perteet will not be responsible for any effort in the design, estimation or specifications for irrigation.
- QA/QC and response to CONSULTANT and AGENCY comments is inherent in this SCOPE.
- The landscape and urban design extents are limited to West Valley Highway from Strander Blvd to S 156th St, and do not include Longacres Way (LAW).
- Urban design furnishings are assumed to be prefabricated features to be furnished and installed by the Contractor.
- The existing sidewalk at LAW is to remain and as such there shall be no property restoration on LAW.
- Tree and landscape requirements shall follow provisions in the Tukwila Municipal Code.
- Trantech will provide the design of sidewalk, plaza areas, planter areas, and street light locations to be used in the 90% submittal prior to Perteet kicking off the 90% design.
- Submittals are limited to one for each level of design. Additional iterations and submittal may be considered as additional extra services.

Deliverables:

- One full-size (22x34) copy of Plans submitted electronically (Adobe PDF) for each submittal;
- One copy of the Engineer’s Opinion of Construction Cost (MS Excel) for bid items associated with the illumination, landscape and urban design.
- One copy of the Specifications (MS Word) for bid items associated with the illumination, landscape and urban design.

Design Criteria

The design criteria will remain the same at that established under the original Scope of Services. Changes in any design standards or requirements after work has begun may result in extra services.

Project Deliverables

Documents, exhibits or other presentations for the work covered by this Agreement (“Documents”) will be furnished by the Consultant to the City upon completion of the various phases of the work. Whether the Documents are submitted in electronic media or in tangible format, any use of the Documents on another project or on extensions of this project beyond the use for which they were intended, or any modification of the Documents, or conversion of the Documents to an alternate system or format will be without liability legal exposure to the Consultant: City shall assume all risks associated with such use, modifications, or conversions. Consultant may remove from the electronic Documents delivered to City all references to Consultant’s involvement and will retain a tangible copy of the Documents delivered to City which shall govern the interpretation of the Documents and the information recorded. Electronic files are considered working files only- Consultant is not required to maintain electronic files beyond 90 days after final project billing, and makes no warranty as to the viability of electronic files beyond 90 days from date of transmittal.

See deliverables under each task for those items the Consultant will provide.

Exhibit B	
Supplement 01	
West Valley Highway (I-405 - Strander Blvd)	
Firm	Supplement 01 Total
TranTech Engineering, LLC	\$75,493
Perteet Engineering, LLC	\$16,492
Landau Associates	\$43,689
1 Alliance	\$12,651
Total Supplement 01	\$148,325
See attachments following for breakout of costs per task	



West Valley Highway (I-405 - Strander Blvd)

Task Items	Project Manager	Senior Civil Engr.	Senior Traffic Engr.	Senior CAD Tech	Office Engineer	Admin 3	Total
Task 1							
1.2 Project Schedule	2	4					
1.3 Subconsultant Coordination	4	16					
1.4 Internal Project Team Meetings and Field Visits	8	16					
1.5 Project Monitoring and Reporting	6	14			8	16	
Task 2.1							
CAR added to BOD	0.5	8	12	8			
Design Analysis	0.5	6	8				
Technical Memo	0.5	8	4				
Revisions based on WSDOT Comments		2	2	2			
QA/QC	0.5						
Task 9					2	1	
Backgroun	0.5	6		8	12		
9.1 Pre-Design Record	1	20		12	1		
9.2 Site Assessment and Mapping	1						
Create Drainage Basin Maps		16		24			
Conduct site reconnaissance		8					
Create Soil Map Showing Soil Types		1		3	1		
Create basin/TDA Map		40		80			
Create change in use area maps to identify existing and proposed impervious areas that will be used for the threshold determination in accordance with the stormwater standards		8		12			
9.3 Conveyance Calculations	1						
Prepare preliminary pipe calculations using full flow conditions with the Manning equation and the Rational Method		32		16			
- QA/QC	1	10			2		
Admin					2	1	
Task 10							
10.3 Illumination for LAW at 90% - 2 sheets	1	4	24	16			
10.4 100% illumination plans, specs, and estimate	1	2	4	4	4		
10.5 Ad-Ready	1	1	2	2	2		
- QA/QC		1	1				
Admin					2	1	
Total Manhours	29.5	223	57	187	36	19	552
Labor Rates (DLR)	\$ 55.00	\$ 55.00	\$ 55.00	\$ 43.00	\$ 38.00	\$ 33.00	
Total Direct Salary Cost	\$1,623	\$12,265	\$3,135	\$8,041	\$1,368	\$627	\$27,059
					Overhead (ICR 148.87%)		\$40,282
					Fee (30%)		\$8,118
					Total Labor Cost		\$75,458
Subconsultants Cost							
			Cost	Markup (10%)			
Total Subconsultant Cost							\$0
Direct Costs (Copy, Fedex, Per Diem ...)							
	Item	#	Amount	Unit			
	Mileage	60	\$0.58	Miles	\$35		
Subtotal Direct Costs							\$35
Total					Total Fee	\$75,493	



Project Tukwila-West Valley Highway (I 405/Strander Blvd) **Contract Start Date** 4/17/2019 **Last Update date** 9/14/2020
Client TranTech Engineering, LLC **Contract End Date** 4/17/2020 **Perteet Project No.** 20190049.000S1
PM Brianne Ross **Contract Duration:** 12 Months

Task	Billing Rate	Sr. Associate	Sr. Engineer / Mgr	Engineer II	Lead Technician/ Designer	Accountant	Total Hours	Labor Dollars
		\$71.00	\$63.00	\$37.00	\$37.00	\$41.00		
90% Urban Design, Landscape Plans/Specs		24.00	6.00	2.00	8.00	1.00	41.00	\$2,493.00
Total 90% Urban Design, Landscape Plans/Specs		24.00	6.00	2.00	8.00	1.00	41.00	\$2,493.00
100% Urban Design, Landscape Plans/Specs		14.00	4.00	2.00	8.00	1.00	29.00	\$1,657.00
Total 100% Urban Design, Landscape Plans/Specs		14.00	4.00	2.00	8.00	1.00	29.00	\$1,657.00
Ad-Ready Urban Design, Landscape Plans/Specs		8.00	3.00	1.00	4.00	1.00	17.00	\$983.00
Total Ad-Ready Urban Design, Landscape Plans/Specs		8.00	3.00	1.00	4.00	1.00	17.00	\$983.00
Expenses								
Total Expenses		0.00	0.00	0.00	0.00	0.00	0.00	\$0.00
Total Hours		46.00	13.00	5.00	20.00	3.00	87.00	
Total Dollars		\$3,266.00	\$819.00	\$185.00	\$740.00	\$123.00		\$5,133.00

Expenses:	
Miscellaneous Expenses	106
Totals:	106

SUMMARY		
Direct Salary Cost		\$5,133.00
Overhead Cost	189.23 %	\$9,713.00
Fee 30%		\$1,540.00
Labor		\$16,386.00
Expenses		\$106.00
Subconsultants		\$0.00
CONTRACT TOTAL		\$16,492.00

Fee Determination Table
Additional Geotechnical Engineering Services
West Valley Highway/I-405 to Strander Blvd

Fee Proposal
 West Valley Highway

Firm Name: LANDAU ASSOCIATES

9/16/2020

Description	Notes	Principal	Senior Associate	Senior Project	Project	Senior Staff	Staff	CAD/GIS	Project Coordinator	Total Hours	Total Direct Salary Cost	OH (2.1253)	Total DSC+OH per Task	Total Fee per Task	Total per Task
Task 1 Additional Geotechnical Engineering Services															
1.1 Geotechnical Engineering Services										0	\$ -	\$ -	\$ -	\$ -	\$ -
1.1a Data Compilation and Review		1					3			4	\$ 177.53	\$ 377.30	\$ 554.83	\$ 53.26	\$ 608.08
1.1b Utility Locates				4						4	\$ 165.40	\$ 351.52	\$ 516.92	\$ 49.62	\$ 566.54
1.1c Coord. Field Activities		2					4			6	\$ 292.05	\$ 620.70	\$ 912.76	\$ 87.62	\$ 1,000.37
1.1d Borehole Logging - Drilling				10						10	\$ 413.50	\$ 878.81	\$ 1,292.31	\$ 124.05	\$ 1,416.36
1.1e Exploration Logs				3						3	\$ 124.05	\$ 263.64	\$ 387.69	\$ 37.22	\$ 424.91
1.1f Engineering Analysis		2		20						22	\$ 993.05	\$ 2,110.54	\$ 3,103.59	\$ 297.92	\$ 3,401.51
1.1g Revised Tech Memo		6		33				3	8	50	\$ 2,248.99	\$ 4,779.79	\$ 7,028.78	\$ 674.70	\$ 7,703.48
1.1h Final Tech Memo		2		4				1	2	9	\$ 437.77	\$ 930.40	\$ 1,368.18	\$ 131.33	\$ 1,499.51
										0	\$ -	\$ -	\$ -	\$ -	\$ -
										0	\$ -	\$ -	\$ -	\$ -	\$ -
										0	\$ -	\$ -	\$ -	\$ -	\$ -
Total Hours per person		13	0	74	0	0	7	4	10	108	\$ 4,852.35	\$ 10,312.71	\$ 15,165.06	\$ 1,455.71	\$ 16,620.77
Current Hourly Rates		\$ 83.03	\$ 61.30	\$ 41.35	\$ 37.31	\$ 31.74	\$ 31.50	\$ 39.00	\$ 33.66						
Direct Salary Cost (DSC)		\$ 1,079.35	\$ -	\$ 3,059.90	\$ -	\$ -	\$ 220.50	\$ 156.00	\$ 336.60		\$ 4,852.35				
Overhead Cost (2.1253 of DSC)	212.53%	\$ 2,293.95	\$ -	\$ 6,503.21	\$ -	\$ -	\$ 468.63	\$ 331.55	\$ 715.38		\$ 10,312.71				
DSC+OH		\$ 3,373.30	\$ -	\$ 9,563.11	\$ -	\$ -	\$ 689.13	\$ 487.55	\$ 1,051.98		\$ 15,165.06				
Fee (0.3 of DSC)	30%	\$ 323.81	\$ -	\$ 917.97	\$ -	\$ -	\$ 66.15	\$ 46.80	\$ 100.98		\$ 1,455.71				
Fully Burdened Rate		\$ 3,697.11	\$ -	\$ 10,481.08	\$ -	\$ -	\$ 755.28	\$ 534.35	\$ 1,152.96		\$ 16,620.77				
Sub-Total Burdened Labor Cost		\$ 3,697.11	\$ -	\$ 10,481.08	\$ -	\$ -	\$ 755.28	\$ 534.35	\$ 1,152.96		\$ 16,620.77				
REIMBURSABLES															
Item	Quantity	Unit	Unit Cost	Sub-Totals	Totals										
Reproduction	1	LS	\$ 148.87	\$ 148.87	\$ 148.87										
Mileage	107	Each	\$ 0.56	\$ 59.92	\$ 59.92										
Daily Field Equipment Charge	2	Each	\$ 20.00	\$ 40.00	\$ 40.00										
Water Level Indicator	1	Each	\$ 30.00	\$ 30.00	\$ 30.00										
Field Disposables	2	Each	\$ 20.00	\$ 40.00	\$ 40.00										
Geotechnical Subcontractor Costs	1	Each	\$ 2,600.00	\$ 2,600.00	\$ 2,600.00										
Geotechnical Laboratory Testing	1	Each	\$ 460.00	\$ 460.00	\$ 460.00										
Total				\$ 3,378.79	\$ 3,378.79										
Firm Name: LANDAU ASSOCIATES Total Project Costs				\$ 20,000	\$ 20,000										

Fee Determination Table
Traffic Noise Assessment Services
West Valley Highway/Langacres Way Shared Use Pathways

Fee Proposal
West Valley Highway

Firm Name: LANDAU ASSOCIATES

11/22/2019

Description	Notes	Principal	Senior Associate	Senior	Project	Senior Staff	Staff	CAD/GIS	Project Coordinator	Total Hours	Total Direct Salary Cost	OH (2.125%)	Total DSC+OH per Task	Total Fee per Task	Total per Task	
Task 4 Environmental and Permitting Services																
4.14 Noise Analysis										0	\$ -	\$ -	\$ -	\$ -	\$ -	
4.14a										0	\$ -	\$ -	\$ -	\$ -	\$ -	
4.14b Pre-consultation with WSDOT			1		1					2	\$ 98.61	\$ 209.58	\$ 308.19	\$ 29.58	\$ 337.77	
4.14c Noise measurements for model validation					8	16				24	\$ 806.32	\$ 1,713.67	\$ 2,519.99	\$ 241.90	\$ 2,761.89	
4.14d Noise assessment and QA/QC			10		32	4		10		56	\$ 2,323.88	\$ 4,938.94	\$ 7,262.82	\$ 697.16	\$ 7,959.99	
4.14e Barrier analysis			12		12			6		30	\$ 1,417.32	\$ 3,012.23	\$ 4,429.55	\$ 425.20	\$ 4,854.75	
4.14f Reporting			8		32		2	6	4	52	\$ 2,115.96	\$ 4,497.05	\$ 6,613.01	\$ 634.79	\$ 7,247.80	
										0	\$ -	\$ -	\$ -	\$ -	\$ -	
										0	\$ -	\$ -	\$ -	\$ -	\$ -	
										0	\$ -	\$ -	\$ -	\$ -	\$ -	
										0	\$ -	\$ -	\$ -	\$ -	\$ -	
										0	\$ -	\$ -	\$ -	\$ -	\$ -	
										0	\$ -	\$ -	\$ -	\$ -	\$ -	
										0	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Hours per person		0	31	0	85	20	2	22	4	164	\$ 6,762.09	\$ 14,371.47	\$ 21,133.56	\$ 2,028.63	\$ 23,162.19	
Current Hourly Rates		\$ 80.29	\$ 61.30	\$ 50.00	\$ 37.31	\$ 31.74	\$ 31.50	\$ 39.00	\$ 33.66							
Direct Salary Cost (DSC)		\$ -	\$ 1,900.30	\$ -	\$ 3,171.35	\$ 634.80	\$ 63.00	\$ 858.00	\$ 134.64						\$ 6,762.09	
Overhead Cost (2.125% of DSC)	212.53%	\$ -	\$ 4,038.71	\$ -	\$ 6,740.07	\$ 1,349.14	\$ 133.89	\$ 1,823.51	\$ 286.15						\$ 14,371.47	
DSC+OH		\$ -	\$ 5,939.01	\$ -	\$ 9,911.42	\$ 1,983.94	\$ 196.89	\$ 2,681.51	\$ 420.79						\$ 21,133.56	
Fee (0.3 of DSC)	30%	\$ -	\$ 570.09	\$ -	\$ 951.41	\$ 190.44	\$ 18.90	\$ 257.40	\$ 40.39						\$ 2,028.63	
Fully Burdened Rate		\$ -	\$ 6,509.10	\$ -	\$ 10,862.83	\$ 2,174.38	\$ 215.79	\$ 2,938.91	\$ 461.18						\$ 23,162.19	
Sub-Total Burdened Labor Cost		\$ -	\$ 6,509.10	\$ -	\$ 10,862.83	\$ 2,174.38	\$ 215.79	\$ 2,938.91	\$ 461.18						\$ 23,162.19	
REIMBURSABLES																
Item	Quantity	Unit	Unit Cost	Sub-Totals	Totals											
Reproduction	0	LS	\$ -	\$ -	\$ -											
Mileage	100	Each	\$ 0.56	\$ 56.00	\$ 56.00											
Field Supplies	1	Each	\$ 100.00	\$ 100.00	\$ 100.00											
Parking	0	Each	\$ -	\$ -	\$ -											
Geotechnical Subcontractor Costs	0	LS	\$ -	\$ -	\$ -											
Cultural Resources Subcontractor Costs	0	Each	\$ -	\$ -	\$ -											
Geotechnical Laboratory Testing	0	Each	\$ 100.00	\$ -	\$ -											
				Total	\$ 156.00											
Prorated Salary Escalation											\$ 370.59					
(40% of labor * 4% increase)																
Firm Name: LANDAU ASSOCIATES Total Project Costs											\$ 23,689					

Exhibit B



Project City of Tukwila: West Valley Highway (I-405 to Strander Blvd)
Project No. TRAN_19-079
Project Manager Dave Peebler

Client Trantech Engineering, LLC
Client Project No.
Project Manager Kash Nikzad

Contract Start Date: September 13, 2019
Contract End Date: December 31, 2020

Staff		Branden	Robert	Thao		
Work Element #	Work Element	CADD 5	CADD 5	Billing/ Acct Coordinator	Total Hours	Total Dollars
	Billing Rate	39.00	39.50	33.50		
3.0	Survey Mapping	2.00	37.00	0.75		
	Work Element Total Hours	2.00	37.00	0.75	39.75	
	Work Element Total Dollars	\$ 78.00	\$ 1,461.50	\$ 25.13		\$ 1,564.63

Summary		
Direct Salary Cost		\$ 1,564.63
Overhead Cost	157.56%	\$ 2,465.24
Fee	30.00%	\$ 469.39
Labor Total		\$ 4,499.26
Expenses		\$ 8,152
Subconsultants		\$ -
Total		\$ 12,651.26

Supplemental Agreement No. 1 Summary

Task	Fee	Notes
Noise Assessment	\$23,689	This was not part of original scope, required by WSDOT at environmental kick-off meeting.
Improve Illumination on Longacres Way	\$10,020	Requested scope increase by City.
Landscaping and urban design	\$16,492	Original contract only included landscaping/urban design to 30% level.
Additional Potholing Expense	\$8,152	Additional site visit required and additional equipment rental and time was outside original scope.
Collision Analysis Report, Design Analysis, and Mode Function Memo	\$9,479	Original scope did not include completing a Collision Analysis Report. WSDOT requirement.
Additional 7 title reports reviewed and easement/potholing	\$4,499	Additional survey costs for more title report reviews than originally scoped.
Work Element 9.1-9.3	\$39,709	Inadvertent error from original contract. Consultant did not allot time for work elements 9.1-9.3 as an oversight during negotiations on fee.
Additional Geotechnical Services for Pedestrian Bridge Foundation and section of report needed for SPU	\$20,000	The initial geotechnical investigation was limited to what was necessary for a wall, as SPU requires no net increase in weight over their pipe. Design has determined a pedestrian bridge over the SPU pipe will be a better option at a lower construction cost.
Bring Longacres Way to Ad-ready	\$3,228	Original scope was for shelf ready only
Additional Project Management for supplement items	\$13,057	PM for the above supplement work elements
Total	\$148,325	