Washington State Department of Transportation
Paula J. Hammond, P.E.
Secretary of Transportation

Urban Corridors
401 Second Avenue South, Suite 400
Seattle, WA 98104
206-464-1121
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May 21, 2009

Mr. Mike Rigsby
PB Americas Inc.
999 Third Avenue, Suite 2200
Seattle, WA 98104

Re: SR 99, Alaskan Way Viaduct and Seawall Replacement Project
Agreement Y-9715 Task BE, Amendment 05
Record Original & Notice to Proceed

Dear Mr. Rigsby:

Enclosed for your records is one fully executed original of Amendment 05, Task BE for Agreement Y-9715. The Amendment Task Start Date is April 10, 2006 and the Task End Date is extended from June 30, 2009 to December 31, 2009. The total amount authorized for this amendment remains $1,205,351 to assist the state as prescribed in the Scope of the Task Order document. This amendment is for the purpose of time extension and funds reallocation only; there is no change to the scope of work or the budget for this Task Order as a result of this Amendment.

The manager for this task is Alec Williamson. He may be reached at 206-382-6366. Invoices should be sent to him at 999 Third Avenue, Suite 2300, Seattle, WA, 98104.

Please call me at 206-716-1139 if you have any questions.

Sincerely,

Curtis E. Bronson
UCO Rates and Scope Verification Analyst
Urban Corridors Office

Enclosures:
cc: A. Williamson MS 230
G. Davis, MS 95
UCO Consultant Liaison Files
D. Dilley, MS 47323
B. Runion, MS 47420 (with second original)
T. Tobin, MS 230

EXHIBIT O

Washington State Department of Transportation

Task Order Amendment

All terms and conditions of this agreement are in full force and effect for this Task Order document.

Agreement No.	Y-9715
Task No.	BE
Amendment No.	05

On-Call Agreement Manager Information

Agreement Manager	Phone	Org.	Mailstop
Doyle Dilley	360-705-7107	308010	47323

Mailing Address			
PO Box 47323	Olympia	WA	98504-7323

Project Manager Information *(If different from On-Call Agreement Manager)*

Project Manager	Phone	Org.	Mailstop
Alec Williamson	206-382-6366	589206	MS-230

Mailing Address			
999 Third Avenue, Suite 2424	Seattle	WA	98104

Project Information

Project Title	
Design Alternatives Videos, Visual Simulations of Construction Sequences, Traffic Flow Plans & Graphic Support	
State Route No(s). SR 99	County(s) King

Task Schedule

Amendment Start Date	Task End Date
April 10, 2006	December 31, 2009

← No payment will be made for work done **PRIOR** to Amendment Start Date or for work done **AFTER** Task End Date

Task Cost

Prior Task Amount → **$1,205,351.00**

Work Order No.	Org. Code	Amount	Fed. Aid Part.?	This section required if there is Fed. Aid Part.	
				Fed. Aid Project No.	Fed. Aid Part. %
XL3233, Gp 28	589206	$0.00	○ Yes ◉ No	AZ (close)	0
XL3236, Gp 22	589206	-$14,540.21	○ Yes ◉ No	AZ (close)	0
XL3237, Gp 11	589206	$13,443.28	○ Yes ◉ No	AZ (close)	0
XL3237, Gp 11	589206	-$13,443.28	◉ Yes ○ No	0099(097)1 (keep	100
XL3238, Gp 25	589206	$14,540.21	○ Yes ◉ No	AN (keep open)	0
XL3240, Gp 25	589206	$0.00	○ Yes ◉ No	AZ (close)	0
XL3241, Gp 22	589206	$0.00	○ Yes ◉ No	AZ (close)	0
			○ Yes ○ No		
			○ Yes ○ No		
			○ Yes ○ No		

Amended Task Amount → **$0.00**

Total Task Amount → **$1,205,351.00**

Consultant Information

Prime Consultant	Contact
PB Americas, Inc. - AWV	Mike Rigsby

Address		
999 Third Avenue, Suite 2200	Seattle	WA 98104

Phone	Fax	E-Mail	
206-382-6352	206-382-5291	rigsbym@consultant.wsdot.wa.gov	[redacted]

Are there any Subconsultants working on this Amendment? ☐ Yes ☒ No
If Yes, complete the Subconsultant Worksheet and return with signed Task Amendment.

Approval Signatures

*****Note: Two original signed Documents are required.*****

Consultant

Washington State Department of Transportation

Agreement Manager *(Signature required for execution of document ONLY for Communications and Public Involvement and Environmental Services Agreements)*

DOT Form 130-010 EF
Revised 11/2003
EXHIBIT O

Agreement No. Y-9715
Task No. BE
Amendment No. 05

Scope of Task Order

Provide description of work and reference attachments for prime consultant and all subconsultants (to include detailed description of work schedule and estimate).

Report Due Date
November 30, 2009

The STATE has requested that the CONSULTANT continue providing design alternative videos, visual simulations of construction sequences, traffic flow plans and graphic support through the end of 2009 in light of the bored tunnel alternative. This support is on an as-needed-basis.

Scope: No change.

Schedule: Extend the Report Due Date from May 31, 2009 to November 30, 2009 and Task End Date from June 30, 2009 to December 31, 2009.

Budget: No change.

List of Attachments and Exhibits:
None.

Distribution: Originals: ☒ Consultant ☐ Accountant
Copies: ☒ File ☒ Task Manager ☒ Consultant Services ☒ Other Stacy Scott, UCO

DOT Form 130-010A EF
Revised 8/2003

EXHIBIT O

TREND NOTICE
ALASKAN WAY VIADUCT & SEAWALL REPLACEMENT PROGRAM

Washington State Department of Transportation

Trend Title: **Establishment of Roadway Configuration - Bored Tunnel Alternative**	Date: 12/17/2009
Trend Log Number/Rev. **C0004**	Segment Name: Central Waterfront
Prepared By: Dawn McIntosh, 12/17/2009 Dawn M. McIntosh Name / Date Preparer's Supervisor Alec Williamson, 12/17/2009 Alec Williamson Name / Date	Approval Level / Authority: ☐ Director of Engineering & Administration Support
Nature of Change: ☐ Scope	☐ Schedule ☐ Budget
Does Trend Impact Legislative Funding Allocation? ☒No ☐Yes	Does Trend Affect Biennium Aging? ☒No ☐Yes

Level of Approval Requested:

☒ *Full Approval*

☐ *Approval for Scope Only; Additional Study / Justification to follow*

Description of the Trend (Use Continuation Sheets as Needed):

Approval of this trend will establish the basis for design and the geometric configuration for the Bored Tunnel Alternative.

- Basis for Design: See Attachment #1
  - The Bored Tunnel Alternative extends from a point between S. Royal Brougham Way and S. King Street, in the south, to Roy St., in the north
  - Functional Classification: Principal Arterial
  - Design Classification:
    - Holgate St. to Thomas St.: P1- Urban (Full Limited Access)
    - Thomas St. to Mercer St.: Urban Managed Access Class 1
    - Mercer St. to Roy St.: match existing Urban Managed Access Class 3
  - Design Speed:
    - The design speed and posted speed will be 50 MPH between S. Holgate Street and Thomas Street.
    - The design speed and posted speed will be 40 MPH from Thomas Street to the northerly project Terminus at Roy Street.
  - Horizontal and vertical Stopping Sight Distances will be met

- Bored Tunnel Alternative Geometric Configuration: See Attachment #2, Roadway Configuration, and Attachment #3, Bored Tunnel Alternative Alignment Study
  - Horizontal alignment:
    - South End: See Attachment #4 for South End Key Assumptions
      - The southerly end of the project limits will be located on Alaskan Way, between S Royal Brougham Way and S. King Street.
      - South Ventilation building will be located east of SR 99 between Dearborn Street and S. King Street.
      - The cut and cover section that transitions from the surface highway system to the bored tunnel will span from near Charles St. to S. King Street

- Two cross streets may be constructed. The new cross streets, Charles Street and Dearborn Street, will provide connectivity across the new SR 99 alignment between the city street grid system and the waterfront.
    - The number of intersections to be included in the project will be determined through an engineering analysis, the urban design approval process, and the results of a benefit-cost analysis. In order to match up the roadway configuration with the recently completed CEVP estimate of cost, a risk will be assumed in proceeding with two intersections in the baseline.
- All entering and exiting ramps will be right-on or right-off, except the Southbound Off ramp, which will be left-off.

- The Tunnel Bore:
    - The tunnel bore will begin on Alaskan Way, at the eye-wall, at the south side of the S. King Street intersection
    - The tunnel bore will traverse northwesterly under the Alaskan Way street right-of-way, between S. King St. and Yesler Way
    - The alignment will leave Alaskan Way street right-of-way near Yesler Way, travel beneath the existing Viaduct foundations, and traverse northwardly, under the 1st Avenue right-of-way near University Street
    - The tunnel bore will extend under the 1st Avenue right-of-way, from University Street to Stewart Street
    - Leaving 1st Avenue near Stewart St., the tunnel bore would traverse in a northerly direction, diagonal to the city street grid system, until it reached the 6th Avenue street right-of-way, near Denny Way
    - The northerly tunnel eye-wall will be located in 6th Avenue north of Thomas Street

- The North End:
    - The north cut and cover section will extend along 6th Ave between Thomas and Harrison
    - The north vent building will be located in the southeast quadrant of 6th Avenue and Harrison Street
    - All entering and exiting ramps will be right-on or right-off, except the Northbound On ramp and Southbound Off ramp, which will be left-on and left-off, respectively.
    - 6th Avenue will be extended from Harrison Street to Mercer Street with a curved alignment paralleling the west side of SR 99.
        - A second option for the 6th Avenue extension is under consideration, a straight alignment following the vacated City of Seattle right of way through the Gates Foundation parcel
    - Portions of 6th Avenue and Harrison Street will be reconstructed following completion of the cut and cover section.
    - Three cross streets, John Street, Thomas Street, and Harrison Street, will be reconnected across Aurora Avenue following opening of the bored tunnel.
    - Broad Street, through the project limits, will be vacated by the city of Seattle
    - The northerly terminus of the retained cut and connections back into the surface street grid system will occur in the vicinity of Mercer Street

- Tunnel cross section:
    - For estimating purposes, the inside diameter of the tunnel will be approximately 49 feet.
    - The tunnel will be in a stacked arrangement with two northbound travel lanes on the lower deck and two southbound lanes on the upper deck.
    - The travel lanes will be 12.0' in width, minimum
    - The 4.0' (minimum) shoulders in both the northbound and southbound directions will be located on the same side of the tunnel as the emergency exits and egress corridor to provide safe passage to the emergency stairwells in the event of an emergency
    - The 2.0' (minimum) shoulders in both the northbound and southbound directions will be located on the plenum side of the tunnel

- The tunnel vertical clearance for each deck will be a minimum of 15' over the travel lanes and 14.5' minimum over the shoulders.

- Vertical Alignment: See Attachment #5: Tunnel Profile Memo
  - Maximum grade will be +/- 6.0%.
  - Minimum vertical clearance of 0.5 Tunnel Diameter will be provided under the Elliott Bay Interceptor and Burlington Northern Santa Fe railroad tunnel.
  - Minimum vertical clearance between the tunnel and the pile tips of the existing Alaskan Way Viaduct will be 10.0 feet.
  - Since alternative tunnel profiles are under consideration, a future Trend may be necessary to address the selection of the baseline vertical profile.

Justification for the Trend (Use Continuation Sheets as Needed):

Why are we requesting approval of this Trend, and what are the benefits?
This trend is being requested to establish the Bored Tunnel Alternative geometric configuration resulting from the Value Engineering (V.E.) and Cost Estimation Valuation Process (CEVP) studies that occurred from October 24, 2009, to November 30, 2009.

The benefits of establishing the Bored Tunnel Alternative geometry is to finalize the horizontal and vertical alignments and tunnel cross section so that the Supplemental Draft Environmental Impact Statement (SEIS) can be completed and the Tunnel Design-Build Request for Proposals (RFP) can be completed. These processes need to be completed in a timely manner, so as to maintain schedule adherence.

If the Trend is approved, what are the drawbacks? Identify and discuss any negative impacts.
Prior to the completion of the recent VE and CEVP Studies, the project was being designed to primarily follow the 1st Ave alignment. Thus, all Engineering studies and Supplemental Draft EIS Discipline Studies, and associated plan sets, were prepared based on the 1st Ave alignment. Approval of this Trend will adopt the VE and CEVP studies recommendation to shift the alignment onto Alaskan Way Blvd. to mitigate cost and risk issues associated with the earlier alignment.

Drawbacks include:
- Re-working of EIS Discipline Reports and EIS Snap Shot Plans
- Re-working of Engineering Technical Reports and Tunnel Design-Build RFP Reference Plans sets
- Increase cost of Preliminary Engineering to perform the re-work,
- Completion of the Tunnel Design-Build RFP needs to be delayed slightly to allow the time needed to perform the preliminary engineering re-work.
- The project will meet the overall program schedule

Impacts of this Trend:
Improved Maintenance of Traffic during construction
Overall schedule impact reductions
Reduction to the overall project costs
Reduction in the overall project risks have been mitigated by shifting the alignment from 1st Ave to Alaskan Way.

Schedule Impacts to QPR Milestones:
Since this trend is only for the purpose of establishing the Bored Tunnel Alternative geometric configuration, there are no overall project schedule impacts anticipated as a result of this trend. Delays associated with the RFP will be absorbed within the overall schedule. The schedule for this alignment will become the new baseline schedule for the project. The table below identifies the key milestones associated with WIN U09903A.