



**Washington State
Department of Transportation**

Supplemental Agreement Number <u>02</u>		Organization and Address	
Original Agreement Number S-587		PBS Engineering and Environmental 415 W 6th Street, Suite 601 Vancouver, WA 98660 Phone: 360.695.3488	
Project Number S-587	Execution Date 12/17/14	Completion Date 6/30/21	
Project Title NW Brady Road Improvements	New Maximum Amount Payable 1,549,306		
Description of Work NW Brady Road Improvements N W 16th Avenue to 500' North of NW 25th Avenue Complete 30%, 60&, 90% and final design including surveying, environmental permitting and documentation, right of way acquisition, construction inspection and management. Original Agreement Amount = \$818,774.00 Supplement 1 extended time only Supplement 2 Amount = \$730,532.00			

The Local Agency of City of Camas
desires to supplement the agreement entered in to with PBS Engineering and Environmental
and executed on 12/17/14 and identified as Agreement No. S-587

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:
see attached exhibit "A"

II

Section IV, TIME FOR BEGINNING AND COMPLETION, is amended to change the number of calendar days for completion of the work to read: Completion date is 6/30/21

III

Section V, PAYMENT, shall be amended as follows:
See attached CM Budget

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

SUPPLEMENT 2 EXHIBIT "A"

SCOPE OF WORK Construction Administration Services

NW Brady Road Improvements City of Camas, Washington

GENERAL DESCRIPTION

The City of Camas (City) has asked PBS to perform construction management support for the **NW Brady Road Improvements** Project. The project is currently in the Final Design phase and is expected to start construction in June 2019. PBS is proposing the scope items below to accommodate this work.

In general, the construction engineering phase will involve, but not be limited to, the following key components and deliverables:

- 1) Preparation and submittal of monthly invoices to City for services performed
- 2) Construction management and administration
- 3) Attendance at preconstruction conference
- 4) Preparation of Record of Materials (ROM)
- 5) Review of material submittals
- 6) Tracking of weekly statements of working days
- 7) Prepare and review of contractor monthly pay estimates and submittal to City
- 8) Review of contractor proposals for alternate "or equal" materials
- 9) Lead and attend at weekly on-site construction meetings preparing g agendas as needed.
- 10) Construction engineering support
- 11) Construction Inspection
- 12) Preparation and submittal of construction record drawings after construction
- 13) Preparation of draft project closeout paperwork

ASSUMPTIONS

The following assumptions are specific to the work involved with construction management and inspection:

- 1) Construction will be completed by July 2020, within an assumed 14 months.
- 2) Construction staking will be performed by PBS Contractor.
- 3) Probable start of construction: May 2019.
- 4) Probable end of construction: July 2020.
- 5) The City will be responsible for bid opening, award, and contract execution for the proposed project.
- 6) As an extension of City staff, PBS will provide final approval of construction related paperwork items. City staff will have approval authority on changes that alter the scope, schedule or budget on the construction project. The PBS Construction Manager will be responsible for distribution of paperwork items to the Contractor, City staff, and PBS' Construction Inspector.

- 7) The City staff, with assistance from the PBS Construction Manager, will be responsible for any negotiations or management of disputes with the Contractor, utility companies, or private property owners.
- 8) PBS will maintain documentation as items are reviewed and approved.
- 9) In this scope, "PBS" is used to represent both PBS' Construction Manager, Project Assistant and Project Inspector, unless otherwise indicated in the task description.

SCOPE OF WORK

Task 14: Project Management and Coordination

Sub-Task 14.1: Contract Administration, Invoicing, and Progress Reports

PBS will perform project management services to include the following:

- 1) Prepare and submit monthly invoices. Each invoice will include: date period covered by invoice, number of hours worked during the billing period with billing rates shown, expenses and associated mark-ups, total cost for labor and expenses for the billing period, and a total amount summarizing labor and expenses. No additional markup will be included in the billing by PBS. Assumes project set-up and 14 monthly invoices.
- 2) Prepare a Contract Summary Report to accompany the monthly invoices. The Contract Summary Report will list each invoice as well as current invoice with an itemized summary of invoice numbers, dates, and amounts billed for labor and expenses. The Contract Summary Report will also list the total amount billed to date, total amount remaining under contract, and contract expiration date.
- 3) Maintain contract-required documentation. Provide copies of project files and records to the City for audits and public information requests. Final documents shall be provided in electronic format as requested.
- 4) Maintain WSDOT required reporting such as quarterly Project reports (QPRs)

Sub-Task 14.1: Deliverables

- 1) Monthly invoices, and Contract Summary Reports
- 2) Project documentation

Sub-Task 14.2: Preconstruction and Kickoff Meetings

- 1) An initial kickoff/coordination meeting will be conducted with PBS' project team and City staff to establish procedures/protocols and communication requirements for the project. This meeting should occur prior to bid opening.
- 2) PBS will assist City staff with the bid opening, award and execution of the construction contract.
- 3) PBS will assist the City with coordination of the preconstruction conference. PBS will schedule the conference, invite attendees, produce an agenda, and take meeting notes.
- 4) Pre-bid meeting, if required.

Assumptions:

- 1) Coordination and pre-construction meetings will be attended by the PBS construction services manager, design engineer, office engineer and inspector.

Sub-Task 14.2: Deliverables

- 1) Kickoff coordination meeting agenda and notes provided to the City.

- 2) Preconstruction conference meeting agenda and notes provided to the City and the prime Contractor.

Sub-Task 14.3: Utility Coordination

PBS will facilitate and coordinate with the Contractor and with the utilities companies to ensure the relocation of their facilities.

Sub-Task 14.3: Deliverables

- 1) Copies of written communications with utilities.

Sub-Task 14.4 – Construction Advertisement Assistance

The City will advertise the project for construction. Consultant will provide assistance during the bidding process.

- 1) During the advertisement period Consultant will work with the city staff to answer questions from bidders and to prepare addenda as necessary. Addenda will be posted to the City website by the City.
- 2) PBS will review contractor bids, review bidding documents and make a recommendation for award.
- 3) Consultant will assist City staff with award and execution, as necessary.

Sub-task 14.4 Deliverables

- 1) Addenda as necessary.
- 2) Contract award recommendation.

Task 15: Construction Management and Engineering

Sub-Task 15.1 Construction Surveying and Staking

PBS will provide construction surveying and staking, monumentation and aerial photography services.

Sub-Task 15.1.1 Construction Staking

Construction staking tasks include:

- 1) Verify, establish, and maintain site control
- 2) Silt Fence, High Visibility Fence, and Saw Cuts
- 3) Sanitary Sewer (connections and cleanouts)
- 4) Storm (ponds, manholes, cleanouts, CB's, outfalls, and pipe)
- 5) Water (hydrants, blow-offs, bends, tees, and pipe)
- 6) Final Curb
- 7) Joint Utility Trench (centerline every 50' with finish grade)
- 8) Retaining Walls
- 9) Light Poles: (26 total)
- 10) Electrical Pedestrian signals (Brady Rd and 16th Ave (7 total))
- 11) Asbuilts (Storm, sanitary, and water. Assume traffic control provided by contractor)

Assumptions:

- 1) Asbuilts will be surveyed for underground features only. Storm sewer, sanitary sewer and waterlines.
- 2) Contractor will provide traffic control when necessary for survey crew access.
- 3) Stakes will be placed one time.
- 4) Re-staking will be added work.
- 5) A contingency staking task will be added for additional surveying

Sub-Task 15.1.1 Deliverables:

- 1) Construction staking plan sheet, cut sheets and/or notes
- 2) Asbuilt notes

Sub-Task 15.1.2 Monumentation

PBS will verify existing monuments that are to be maintained and those that will be destroyed during construction. PBS will obtain monument destruction permit from the DNR, replace destroyed monuments and file a post construction record of survey.

Sub-Task 15.1.2 Deliverables:

- 1) Create a list of monuments that are to be maintained and those that will be destroyed during construction.
- 2) Create and file a monument destruction permit with the State DNR
- 3) Replace monuments
- 4) Set monuments for centerline control.
- 5) Create and file a post construction record of survey with the State DNR

Sub-Task 15.1.3 UAS Services

PBS will perform UAS flights and take aerial photo and videography for sharing through the City's website. This service includes post flight processing of photos and videos plus storage of the post processed pictures and videos.

Assumptions:

- 1) Drone services are contingent on FAA authorization
- 2) 1 flight per month for 14 months

Sub-Task 15.1.3 Deliverables:

- 1) Monthly (12) videos taken end-to-end over the construction site.
- 2) Monthly (12) panoramic photos from 3 vantage points, north end, mid project and south end
- 3) Web-links for attachment to the city website.

Sub-Task 15.1.4 CPU Facility Staking

PBS will stake the following project elements prior to the Contractor starting work:

- 1) Proposed right-of-way and back of sidewalk at the following locations:
 - a. Along the back of walk/curb behind walk in the southwest corner of NW Brady Rd and NW 16th Ave, frequently enough to accurately place the new vault and equipment for CPU Loc #2, #3 and #4, and along the right-of-way both sides of the angle point at CPU Loc #4.

- b. Back of walk and right-of-way on the west side of NW Brady Rd beginning at STA 10+50 and running to STA 17+00 @ every 50 feet.
 - c. Back of walk and right-of-way on the east side of NW Brady Rd beginning at STA 12+00 and running to STA 14+50 @ every 50 feet, and at STA 17+00.
- 2) Cuts/fills to finish grades marked on all of the stakes in order to have the conduits and equipment installed at the correct elevations.

Assumptions:

- 1) Stakes will be placed one time.
- 2) Re-staking will be added work.

Sub-Task 15.1.4 Deliverables:

- 1) Construction staking plan sheet, cut sheets and/or notes

Sub-Task 15.2: Prepare Record of Materials (ROM)

PBS will prepare a Record of Materials (ROM) and maintain a documented record of material submittals. PBS will log in and track each approved submittal by the City. PBS duties will include the following:

- 1) PBS will develop the ROM with material acceptance criteria.
- 2) PBS will provide the City with a draft ROM for approval and update the ROM acceptance criteria as needed by the City during construction.

Assumptions:

- 1) The ROM will the items in the current engineer's estimate. Assumes 120 bid items.

Sub-Task 15.2: Deliverables

- 1) Record of Materials (ROM)

Sub-Task 15.3: On-Site Meetings

PBS will attend on-site project progress and utility coordination meetings. Other specific pre-work meetings may include the following (based on need during construction or Contractor request): traffic control/staging, construction surveying, HMAC paving, and striping. PBS will issue meeting notes for each meeting attended. Generally, PBS' Construction Manager or Project Assistant, PBS Inspector, and Contractor will be in attendance. Progress meetings will be used to promote effective communication between the City, PBS, Contractor, and other project stakeholders.

Assumptions:

- 1) Assumes 25 on-site meetings of up to 2-hours each.
- 2) Assume 1-hour per meeting and agenda and notes

Sub-Task 15.3: Deliverables

- 1) Construction meeting notes provided to the City.

Sub-Task 15.4: Material Submittals

PBS will receive and review material submittals (Manufacturer's Certificates of Compliance, Certificates of Material Origin, cut sheets, Qualified Product List sheets, etc.), construction sequence schedules, shop drawings, and other items required from the Contractor to ensure compliance with contract requirements. PBS will review the following submittals, including but not limited to: material-specific submittals, HMA and

concrete mix designs, retaining wall calculations and drawings, illumination materials, landscape items, and others required by construction contract specifications.

PBS will receive, review, and maintain material submittals. Upon completion of review, PBS will provide approved submittals to the City of appropriate approval requirements for material submittals. PBS will transmit the approvals to the Contractor.

Assumptions:

- 1) Assumes up to 50 material submittals covering materials as listed in the current engineer's estimate.
- 2) Assumes 3 hours per submittal.

Sub-Task 15.4: Deliverables

- 1) Copies of approved material submittals.
- 2) Copies of written communications with the Contractor.

Sub-Task 15.5: Construction Administration and Engineering

PBS' Construction Manager will coordinate with the PBS Inspector and City staff throughout the duration of the project, keep a record of decisions made, review and recommend solutions to change order requests, and review progress and final progress estimates. PBS will review and track Contractor labor compliance documentation, including subcontracts, utilization reports, and subcontractor paid reports. PBS will review the following submittals, including but not limited to: traffic control plans, staging plans, erosion and pollution control plans, quality control plan, construction schedules, and others required by construction contract specifications. Approvals will be by the City Engineer.

PBS duties will include the following:

- 1) PBS will receive and review the SPCC Plan and provide the City with a recommendation of approval criteria.
- 2) PBS will review the Contractor's proposed Monthly Pay Estimate. PBS will provide a draft Monthly Pay Estimate to the City for review and approval. Assumed a total of six (14) monthly estimates plus the final estimate.
- 3) PBS will receive and review daily reports recording pertinent information such as: Contractor's hours on the site, weather conditions, and data relative to potential Change Orders, Minor Change Orders, or changed conditions, site visitors, daily activities, and decisions.
- 4) PBS will review and track the Contractor's D/M/WBE documentation.
- 5) PBS will review, check and track the Contractor's certified payrolls, sublet requests and "Buy America Requirements.
- 6) PBS will prepare the SWPPP for the City and assist with transfer to the Contractor.
- 7) PBS will receive and review Contractor's Erosion Control Inspection reports. PBS will notify the City staff if any irregularities or concerns are identified.
- 8) PBS will receive and review Requests to Sublet Work for approval of subcontractors and provide the City with approved documents.
- 9) PBS will receive, review, and determine the acceptability of schedules provided by the contractor. These may include the Progress Schedule, Schedule of Submittals, and Schedule of Values.

Assumptions:

- 1) Assumes 1-review of each document

- 2) Assumes half of the documents will have to be returned to the Contractor for re-submittal.
- 3) Assume re-review for half of submitted documents

Sub-Task 15.5: Deliverables

- 1) Copies of plans and reports provided by the Contractor with approval
- 2) Copies of Erosion Control Inspection Reports to the City
- 3) D/M/WBE documentation
- 4) Checked certified payrolls
- 5) SWPPP transfer documentation.
- 6) Draft of Monthly Pay Estimates for review and approval
- 7) Copies of Inspector's daily reports
- 8) Copies of written communications
- 9) Record of field decisions
- 10) Record of Contractor labor compliance, including subcontracts
- 11) Copies of Schedules provided by the Contractor

Sub-Task 15.6: Response to Questions and Change Orders

PBS will assist the City in response to requests for information (RFI) and response for clarifications (RFC) by the Contractor and provide supplemental information as needed to maintain the progress of the work. If field adjustments are required, as a result of a change in conditions or a desired change by the City, PBS will prepare necessary change order documents and plan revisions for approval by City staff. PBS will provide the City with draft change order documents for review, approval, and issuance to the Contractor.

PBS' duties will include the following:

- 1) PBS will assist the City with addressing construction questions and RFIs from the Contractor.
- 2) PBS will assist the City with processing RFCs from the Contractor.
- 3) PBS will assist the City with preparing change orders and provide these to the City for approval and issuance to the Contractor.
- 4) PBS will prepare design changes associated with change orders (including exhibits) during the construction process.

Assumptions:

- 1) Address up to 20 RFI's
- 2) Process up to 10 RFC's
- 3) Prepare up to 10 change orders
- 4) Prepare up to four design changes.

Exclusions: Approval of change order paperwork to Contractor.

Sub-Task 15.6: Deliverables

- 1) Copies of RFIs to the City staff
- 2) Copies of RFCs to the City staff
- 3) Draft Change Orders to the City for approval and issuance to the Contractor
- 4) Plan sheets for design changes

Task 16: Construction Observation

Sub-Task 16.1: Site Visits

PBS' Construction Manager will perform site visits as necessitated by concerns or issues arising from construction, or when requested by the City.

Assumptions:

- 1) Site visits will be weekly for up to 14 months.

Sub-Task 16.1: Deliverables

- 1) Copies of written communications
- 2) Copies of observation reports

Sub-Task 16.2: Geotechnical Support

The PBS geotechnical staff will perform site visits during, excavation, backfill, construction of cement amended subgrade and other times as necessary. PBS will coordinate to address any questions that may arise regarding this field of expertise.

Sub-Task 16.2 – Deliverables

- 1) Copies of construction recommendations.

Sub-Task 16.3 Material Testing

PBS will coordinate the testing of materials as required by the ROM. Test will be performed by third party (Columbia West Engineering.)

Assumptions:

- 1) Assumes material testing as follows:
 - Borrow
 - Four grading and SE
 - Five compaction tests.
 - CAS
 - Six compaction tests
 - CSBC
 - Four grading, SE and fracture
 - Six compaction tests
 - HMA
 - Six complete mix tests (graduation, oil content, rice density)
 - Three aggregate only tests
 - Eight compaction sub-lot tests
 - Gravel backfill for pipe zone
 - Six compaction tests
 - Concrete
 - One grading on coarse aggregate
 - One grading on fine aggregate
 - 12 sets cylinders and breaks

Sub-Task 16.3 – Deliverables:

- 1) Copies of test results and reports.

Sub-Task 16.4: Inspection Services

PBS shall provide on-site construction inspection services. The PBS' construction inspector will be the Engineer's agent for the project and will act as directed by, and under the supervision of the engineer. The inspector's oversight pertaining to the Contractor's work shall, in general, be with the engineer and Contractor, keeping the City staff advised as necessary. The inspector's interaction with subcontractors shall only be through, or with, the full knowledge and approval of the Contractor. The inspector shall communicate with City staff, with the knowledge of and under the direction of the engineer. For budgeting purposes, this assume full time inspection for 52 weeks during a total project time of 14 months. The inspector responsibilities will include the following:

- 1) Inspector will serve as the engineer's liaison with Contractor, working principally through Contractor's superintendent, and assist in providing information regarding the intent of the Contract Documents.
- 2) Inspector will assist in obtaining additional details or information from the City staff when required for proper execution of the work.
- 3) Inspector will conduct on-site observation of the project to ensure work is completed in accordance with the Contract Documents and advise the City staff if any changed conditions are encountered.
- 4) Inspector will coordinate in advance of scheduled major inspections, or specialty inspections and verify that appropriate City staff personnel are present, and that adequate records are kept.
- 5) Inspector will prepare a daily inspector report recording pertinent information such as: Contractor's hours on the site, weather conditions, and data relative to potential Change Orders, Field Orders, or changed conditions, site visitors, daily activities, and decisions.
- 6) Inspector will immediately notify the City staff of any site accidents, emergencies, acts of God endangering the work, or damage to property.
- 7) Inspector will review the contractor's pay estimates to ensure work being paid for has been completed. Inspector will track and process materials-on-hand in accordance with the Contract Documents.
- 8) Inspector will track bid item quantities daily.
- 9) Inspector will represent the City when communicating with Camas citizens.

Assumptions:

- 1) Project inspector on site up to 10 hours per day for 52 weeks over a total project time of 14 months.

Sub-Task 16.4: Deliverables

- 1) Daily Inspection Reports.
- 2) Daily Tracking of Bid Item Quantities.
- 3) Project photos

Task 17: Project Closeout and As-Builts

Sub-Task 17.1: As-Builts

The Final Plans will be revised to conform to construction record drawings from information supplied by the Contractor, and as reviewed by the PBS inspector.

PBS' duties will include the following:

- 1) PBS will review Construction Record Drawings provided by the Contractor.
- 2) PBS will submit the complete set to the City for approval.

Sub-Task 17.1: Deliverables

- 1) Reviewed Construction Record Drawings.

Sub-Task 17.2: Closeout Documentation

PBS will compile project closeout documentation and coordinate with the Contractor and the City to obtain the required documents. PBS will assemble project documentation and deliver to the City at project completion.

- 1) PBS's Construction Manager, Inspector and the City staff will perform final inspections and will create a list of punch list items. PBS's Construction Manager and the City staff will establish dates of substantial, physical, and contract completion.
- 2) PBS will prepare draft letters of substantial, physical, and contract completion for review, approval, and issuance by the City.
- 3) PBS will assemble construction documentation in binders for delivery to the City.
- 4) PBS will represent City staff in WSDOT/HLP file and project reviews and audits.

Sub-Task 17.2: Deliverables

- 1) Draft letters of substantial, physical, and contract completion for approval and issuance by the City
- 2) Hard copy of construction documentation and electronic files on CD

Task 18: Final Design

Task 18 Final Design (PE Phase closeout)

PBS will complete the final edits to the Plans, specifications and estimate. PBS will compile the bidding documents.

REIMBURSABLE EXPENSES

PBS has included reimbursable expenses for:

- 1) Vehicle mileage
- 2) Printing, copying, or binding services

NW Brady Road - CM Budget

City of Camas, Washington
 Wednesday, May 8, 2019

PBS

															PBS	NW Brady Road Construction Management
Task and Description	ENG - MANAGER VII	ENG III	ENG I	Survey V	Survey II	UAS Op	Const IV Insp	Const III Office	Principal Geologist	Geologist III	CAD Mngr	CAD 1	PRJ ADMIN II	Expense	TOTAL	BUDGET AMOUNT
Task 14: Project Management and Coordination															43,568.00	43,568.00
Sub-Task 14.1: Contract Administration, Invoicing, and Progress Reports	40.00										4.00	4.00	20.00		9,716.00	\$9,716.00
Sub-Task 14.2: Preconstruction and Kickoff Meetings	8.00	8.00					8.00	16.00						100.00	5,252.00	\$5,252.00
Sub-Task 14.3: Utility Coordination	8.00	40.00					60.00								13,460.00	\$13,460.00
Sub-Task 14.4: Advertisement and Award Support	8.00	60.00						60.00							15,140.00	\$15,140.00
Task 15: Construction Management and Engineering															220,147.00	220,147.00
Sub-Task 15.1: Construction surveying and staking															116,580.00	\$116,580.00
Sub-Task 15.1.1 Constuction Staking					960.00										84,480.00	\$84,480.00
Sub-Task 15.1.2 Monumentation				16.00	80.00										9,200.00	\$9,200.00
Sub-Task 15.1.3 UAS Services						190.00									19,380.00	\$19,380.00
Sub-Task 15.1.4 CPU Facility Staking					40.00										3,520.00	\$3,520.00
Sub-Task 15.2: Prepare Record of Materials (ROM)	4.00	8.00						120.00							15,412.00	\$15,412.00
Sub-Task 15.3: On-Site Meetings	75.00	20.00					50.00							500.00	22,155.00	\$22,155.00
Sub-Task 15.4: Material Submittals	2.00	20.00						150.00							19,880.00	\$19,880.00
Sub-Task 15.5: Construction Administration and Engineering	40.00	40.00						120.00							25,360.00	\$25,360.00
Sub-Task 15.6: Response to Questions and Change Orders	40.00	40.00						80.00							20,760.00	\$20,760.00
Task 16: Construction Observation															398,915.00	398,915.00
Sub-Task 16.1: Site Visits	120.00													500.00	21,500.00	\$21,500.00
Sub-Task 16.2: Geotechnical Support	10.00							10.00	20.00	40.00				500.00	13,800.00	\$13,800.00
Sub-Task 16.3: Material testing	5.00	10.00						40.00						29,500.00	36,115.00	\$36,115.00
Sub-Task 16.4: Inspection Services							2,600.00							2,500.00	327,500.00	\$327,500.00
Task 17: Project Closeout and As-Builts															25,054.00	25,054.00
Sub-Task 17.1: As-Builts	2.00	8.00					40.00	10.00				40.00			10,692.00	\$10,692.00
Sub-Task 17.2: Closeout Documentation	10.00	8.00					20.00	80.00							14,362.00	\$14,362.00
Task 18: Final Design (PE Phase close-out)															42,848.00	42,848.00
Task 18: Final Design	60.00	120.00	200.00									4.00	12.00		42,848.00	\$42,848.00
TOTAL HOURS	432.00	382.00	200.00	16.00	1,080.00	190.00	2,778.00	686.00	20.00	40.00	4.00	48.00	32.00			
HOURLY RATES	175.00	114.00	86.00	135.00	88.00	102.00	125.00	115.00	190.00	165.00	122.00	82.00	95.00			
TOTAL DOLLARS	75,600.00	43,548.00	17,200.00	2,160.00	95,040.00	19,380.00	347,250.00	78,890.00	3,800.00	6,600.00	488.00	3,936.00	3,040.00		730,532.00	730,532.00