

AMENDMENT NO. 2

CONTRACT NO. 30000641

FOR

Portsmouth Odor Control Facility

Pursuant to Ordinance No. _____

This Contract was made and entered by and between PB Americas, hereinafter called Contractor, and the City of Portland, a municipal corporation of the State of Oregon, by and through its duly authorized representatives, hereinafter called City.

- I. **Additional Compensation** - Additional compensation is necessary and shall not exceed \$224,408. The amended not-to-exceed total contract amount is \$459,900.
- II. **Contract Period** – The contract period remains unchanged.
- III. **Additional Work** – Additional work is necessary for the development of this project. The originally authorized and previously amended Statement of the Work is further amended as follows:

- A. **Project Background**

The additional compensation authorized by this amendment provides for the additional design, public involvement, and project management effort needed to add the design of a second odor treatment facility to the contract, and also includes additional for professional services during the bidding and construction phases of the project. The scope of work for the original contract was limited to the design of one odor treatment facility to be constructed at the discharge of the Portsmouth Force Main to the Portsmouth Tunnel (North Shaft) near the intersection of North Willamette Boulevard and North Carey Avenue. As a result of modeling and testing of air flow in the Portsmouth Tunnel performed during preliminary design, it was concluded that odor treatment was also required at a second location. A biofilter odor treatment facility will be needed just south of the Columbia Boulevard Wastewater Treatment Plant (Columbia Court) and a passive odor treatment facility will be needed at the North Shaft site. A small equipment building housing instrumentation and HYDRA radio communications equipment, and a radio tower with an overall height of approximately 30 feet will also be constructed at the North Shaft site.

The amendment also provides for an expanded public information effort and a geotechnical investigation at the Columbia Court site. Both facilities need to be operational by the time the Portsmouth Force Main is completed and placed into operation in the fall of 2011.

B. Scope of Work – General assumptions

The changes to the General Assumptions of the Scope of Work of the originally authorized and previously amended contract include:

1. Facilities will be required and designed at two sites, the Columbia Court site and the North Shaft site.
2. The main odor treatment facility will be located at the Columbia Court site. Facilities at this site will include an open faced biofilter, associated fans, piping, other mechanical equipment, electrical equipment, instrumentation and control equipment, a structure to house the facility, connection to the existing Portsmouth Tunnel, associated utility connections, site landscaping and public amenities.
3. The second project site will be at the North Shaft Site near the corner of North Carey Avenue and North Willamette Boulevard. Facilities at this site will include passive odor control equipment; instrumentation equipment to monitor the existing tunnel; a small structure to house equipment; a HYDRA antenna and associated tower; and site landscaping and restoration.
4. Contractor will obtain the services of a geotechnical engineering subconsultant to complete two borings at the Columbia Court site, develop engineering recommendations for foundation design, and prepare a report to be used by the Contractor to design the facility. Contractor will not be required to obtain geotechnical drilling services or prepare a geotechnical report for the North Shaft site.
5. The Columbia Court facility may include a public drinking fountain as part of the public amenities, but will not include provisions for a public or private restroom.
6. The City will provide information regarding the specific requirements for the instrumentation equipment, communication equipment, antenna and tower to be installed at the North Shaft facility. This will include model and part numbers, equipment cut sheets, space and other environmental constraints, and other criteria pertinent to the design of the equipment and ancillary facilities.
7. Instrumentation control equipment at the Columbia Court facility will be limited to that required for the odor control equipment and associated facility. This equipment will include a bubbler system for measuring flow depth in the adjacent tunnel and a H₂S/LEL monitoring system. The City will provide the Contractor with any specific requirements for this equipment (including model and part numbers, equipment cut sheets space and other environmental constraints), or advise the Contractor that selection of the specific equipment is at the Contractor's discretion.
8. An arc-flash study will be performed for the odor control facility at Columbia Court. No arc-flash study will be needed for the North Shaft

site.

9. The instrumentation equipment building at the North Shaft site will be split-faced CMU with wood truss supported metal roof, similar to the BES electrical control building at Sweeny and Macadam. Public use of any portion of the equipment building will not be included in the project design.
10. Site restoration and landscaping at the North Shaft site will be the minimum to meet existing code requirements. Additional site amenities and more extensive landscaping, if required by the City, will require further amendment to this Scope of Work and the accompanying Budget and Schedule.
11. Construction of the Portsmouth Odor Control project will be accomplished using one or two independent construction contracts. It is assumed that separation of the design into two contracts, if required, will take place as part of the 90% design submittal by the City.
12. The City will be responsible for advertising, printing and distributing of the the final set of contract documents for construction bidding. BES will also print and issue addenda. The City will print and distribute conformed documents.

C. Scope of Work - Task Descriptions

The currently authorized Scope of Work is amended to include the following additional work and compensation:

Task 1: Project Management Services

Add the following assumptions to Task 1: Project Management Services include:

1. Project management services will be required through the design, bidding, and construction phases of the project.

Task 2 – Preliminary Design Services

Additional work under Task 2: Preliminary Design Services includes:

1. Facilitating one additional Preliminary Design Workshop was required to address the complexity of air flow in the Portsmouth Tunnel and develop design criteria for a second odor treatment facility.
2. Preparing additional site layouts for the second odor treatment facility for review by the City.
3. Preparing renderings showing plan views and elevations of the two facilities to support the public involvement program.
4. Required attendance at four additional public meetings
5. Required attendance at four additional site layout review meetings

6. Preparing a preliminary estimate of construction cost that was not included in the original scope of work.

Task 3: 60% Design

Additional work in Task 3: 60% Design includes:

1. Design of the additional treatment facility at the Columbia Court site.
2. Add, the following assumption to Task 3 Assumptions:
 - The 60% Design Package will be developed and presented as a single construction package. Splitting the design into two packages, if required by the City, will occur subsequent at or before 90% design development.

Task 4: 90% Design

Additional work in Task 4: 90% Design includes:

1. Design of an additional treatment facility at the Columbia Court site.
2. Add the following assumption to Task 4 Assumptions:
 - For the 90% design submittal it is assumed that the project design may be split into a maximum of two (2) contract document packages, if required by the City.

Task 5: 100% Design

Additional work in Task 5: 100% Design includes:

1. Design of the additional odor treatment facility at the Columbia Court site.

Task 6: Public Involvement Support

Additional work in Task 6: Public Involvement Support includes:

1. Public involvement support for the additional odor treatment facility at the Columbia Court site.
2. Add the following assumptions to Task 6 Public Involvement Support:
 - Contractor presentations at other meetings other than public meetings during completion of the preliminary design and at completion of the 60% design review package are not included in this scope or budget estimate.
 - Contractor's level of efforts for this task will be limited to the amount allocated in the budget.

Task 7: Ventilation and Odor Modeling Study

No changes were made to Task 7.

Task 8: Services During Bidding

Add Task 8 Services During Bidding to the Scope of Work. The services to be provided in Task 8 are intended to assist the City during the bid phase and include:

- Preparing and providing written responses to questions from bidders regarding the project design. All questions or other requests for clarifications that may be received from bidders will be submitted to the City and the Contractor will not have direct contact with bidders or their suppliers.
- Assisting the City with the preparation of contract addenda.
- Attending a prebid meeting (maximum of 3 team members, for 3 hours including travel).
- Preparing a conformed set of project documents, incorporating all addenda, to be issued to the successful bidder. The City will print the conformed documents.
- The Contractor's level of effort for this task will be limited to the allocated budget amount.

The City will be responsible for evaluating bids, preparing a bid analysis and evaluation report, and awarding the construction contract. The City will notify bidders of bidding results.

Task 9: Construction Phase Services

Add Task 9 Construction Phase Services to the Scope of Work. The services to be provided in Task 9 are intended to assist the City with review of submittals and provide other support services during construction including:

- Attend Owner's Representative and construction contractor meetings when requested by the City.
- Respond to questions (RFIs) regarding the project design.
- Review project submittals, substitution requests, design alternatives, and shop drawings provided by the construction contractor, and respond in writing. Responses to submittals will be made within five (5) working days after receipt by the Contractor.
- Maintain a project submittal log.
- Conduct periodic site visits. The City will provide construction observation and will be responsible for daily inspection required as part of this project.
- Assist BES with the preparation of revisions to the contract documents resulting from approved change requests
- Prepare a set of record drawings at the completion of the project. The construction contractor will provide the City with

red-lined drawings documenting the changes made during construction for use in preparing the project record drawings. The City will provide these drawings to the Contractor for use in preparing the project record drawings. The Contractor will not be responsible for keeping a record of construction changes. The City will be responsible for printing and distribution of the final record drawings.

- Prepare a narrative Operations and Maintenance Manual for the odor treatment facilities. The City will be responsible for the printing and distribution of the Operations and Maintenance Manual narrative, and incorporation of the narrative with the contractor's submitted O&M material.
- Assist the City with evaluation of the facilities during the warranty period.
- The Contractor's level of effort for this task will be limited to the allocated budget amount.

All RFIs, submittals, and other communications with the construction contractor will be coordinated through the Owner's Representative. The Contractor will have no direct communication with the Construction contractor or subcontractors. A representative from the City will be present at all meetings which include the Contractor. The City will be responsible for printing and distribution of project change directives.

D. Drawing List

The addition of the second odor treatment facility at the Columbia Court site and HYDRA radio tower and equipment at the North Shaft site is estimated to add approximately 32 drawings to the project drawing list included in the originally authorized and previously amended contract. The Amended Project Drawing List includes the following drawings:

Amended Project Drawing List

Drawing Title

General Drawings

Title Sheet (2 if 2 construction contracts)

Drawing Index (may be part of the Title Sheet, 2 if 2 construction contracts)

Civil Drawings

Restoration Plan –North Shaft Site

Restoration Plan – Columbia Court Site

Utility Plan – North Shaft Site

Utility Plan – Columbia Court Site

Civil Sections and Details (1 or 2 sheets)

Erosion Control Plan – North Shaft Site

Erosion Control Plan – Columbia Court Site

Erosion Control Details

Stormwater Plan & Details – North Shaft Site

Stormwater Plan & Details – Columbia Court Site

Demolition Plan – Columbia Court Site

Structural Drawings

General Notes

Foundation and Roof Plan – North Shaft Site

Foundation Plan – Columbia Court Site

Roof Plan – Columbia Court Site

Sections and Details – North Shaft Site

Sections Sheet 1 – Columbia Court Site

Sections Sheet 2 – Columbia Court Site

Detail Sheet 1 – Columbia Court Site

Detail Sheet 2 – Columbia Court Site

Connection Plan and Details – Existing Portsmouth Tunnel

Mechanical/Odor Control Drawings

Plan View – Columbia Court Site

Fan Room Sections and Details – Columbia Court Site

Biofilter Beds Sections and Details – Columbia Court Site

Miscellaneous Detail Sheet – Columbia Court Site

Passive Odor Control Plan and Details – North Shaft Site

Electrical/I&C Drawings

Legend and Abbreviations

Electrical Site Plan – North Shaft Site (Antenna info provided by the City)

One-Line Diagram, Panel Schedule – North Shaft Site

Bubbler Control Panel and Loop Diagrams (up to 5 sheets, info provided by the City)

Bubbler Control Panel Layout – Interior View (Info provided by the City)

Bubbler Control Panel Layout – Exterior View (Info provided by the City)

One-Line Diagram, Panel Schedule – Columbia Court Site

Loop Diagrams – Columbia Court Site (up to 2 sheets)

P&ID – North Shaft Site

P&ID – Columbia Court Site

Building Plan: Power, Grounding, Lighting and Control – North Shaft Site

Building Plan: Power, Grounding, Lighting and Control – Columbia Court Site

Detail Sheet 1 – North Shaft Site

Detail Sheet 1 – Columbia Court Site

Conduit and Wire Schedule – North Shaft Site

Conduit and Wire Schedule – Columbia Court Site

Panel Layout Drawing – North Shaft Site

Panel Layout Drawing – Columbia Court Site

Landscaping Drawings

Tree Preservation and Mitigation Plan – Columbia Court Site

Planting Plan – North Shaft Site

Planting Plan – Columbia Court Site

Irrigation Plan – North Shaft Site

Irrigation Plan – Columbia Court Site

Planting and Irrigation Details

Architectural Drawings

General Architectural Abbreviations/Symbols

Code/Lifesafety Sheet (Maybe able to use one for both facilities)

Architectural Plan – North Shaft Site

Architectural Plan – Columbia Court Site

Roof Plan – Columbia Court Site

Architectural Elevations – North Shaft Site

Architectural Elevations 1 – Columbia Court Site

Architectural Elevations 2 – Columbia Court Site
Section Sheet - North Shaft Site
Section Sheet 1 – Columbia Court Site
Section Sheet 2 – Columbia Court Site
Detail Sheet – North Shaft Site
Detail Sheet 1 – Columbia Court Site
Detail Sheet 2 – Columbia Court Site
Architectural Schedules – North Shaft Site
Architectural Schedules – Columbia Court Site

E. Items to be delivered by Contractor

Add the following deliverables:

1. 60% design Review Package including second facility
2. 90% Design Review Package including second facility
3. 90% construction cost estimate
4. Final Design Package including second facility
5. Final construction cost estimate
6. Construction schedule
7. Responses to City comments for each submittal
8. Boring logs and Geotechnical Engineering Report
9. Monthly status reports for additional contract period
10. Presentation materials supporting Public Involvement
11. Written responses to questions during bidding
12. Written responses for inclusion in addenda.
13. Conformed project documents
14. Written responses to requests for information, other questions, submittals, substitution requests, suggested design alternatives, and shop drains.
15. Project record drawings
16. Draft and final operations and maintenance narrative.

IV. PROJECT TASK BUDGET ADJUSTMENTS

The following tables include the amended not-to-exceed budget amounts.

Summary of the Originally Authorized Contract amount, and Approved and Proposed Amendments		Percentage of the Original Authorized Contract Amount
Original Contract No. 30000641	\$ 235,492	100%
Approved Amendment No. 1	\$-0-	0%
Proposed Amendment No. 2	\$224,408	95.3%
Total Amount of Approved and Proposed Contract Amendments	\$459,900	195.3%

Project Task Budget Adjustments


Task No.	Description	Currently Authorized Task Budget Amounts	Amendment No. 2 Amounts	Adjusted Task Budget Amounts
1	Project Management	\$23,781	\$27,148	\$50,929
2	Preliminary Design	\$49,927	(\$7,008)	\$42,919
3	60% Design	\$55,137	\$46,268	\$101,405
4	90% Design	\$33,931	\$34,432	\$68,363
5	Final Design	\$32,151	\$28,766	\$60,917
6	Public Involvement Support	\$8,918	\$9,372	\$18,290
7	Ventilation and Odor Modeling Study	\$29,117	\$0	\$29,117
8	Services During Bidding	-\$0-	\$11,115	\$11,115
9	Services During Construction	-\$0-	\$56,875	\$56,875
	Expenses	\$2,530	\$9,140	\$11,670
	Subcontractor markup @ 5%	-\$0-	\$8,300	\$8,300
Total Contract Amounts Including Amendments 1 & 2		\$235,492	\$224,408	\$459,900

V. Other Terms and Conditions

All other terms and conditions shall remain unchanged and in full force and effect.

This contract amendment may be signed in two (2) or more counterparts, each of which shall be deemed an original, and which, when taken together, shall constitute one and the same contract amendment.

The parties agree the City and Contractor may conduct this transaction by electronic means, including the use of electronic signatures.

CONTRACTOR SIGNATURE:**PB AMERICAS, INC.**By: Date: 11-16-10Name: Mel SearsTitle: Vice President

Contract No. 30000641Amendment/Change Order No. 2Contract Title: Portsmouth Force Main Odor Control Facility**CITY OF PORTLAND SIGNATURES:**By: n/a
Chief Procurement Officer

Date: _____

By: WFR
Elected Official

Date: _____

Approved:

By: n/a
Office of City Auditor

Date: _____

Approved as to Form:

By: APPROVED AS TO FORM
Office of City Attorney
Paula Menges
CITY ATTORNEYDate: 11/18/10