

AMENDMENT NO. 2
CONTRACT NO. 30001295
FOR
Forest Park Low Tank

Pursuant to Ordinance No. _____

This Contract was made and entered by and between Murray, Smith & Associates, Inc., 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.

The Contract is hereby amended as follows:

1. Additional work is necessary as described in the Scope of Work attached as Exhibit A.
2. Additional compensation is necessary and shall not exceed \$130,884 as detailed in the attached Exhibit B. The new not to exceed amount of this contract shall be \$686,636.

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

CONTRACTOR SIGNATURE:

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.

Murray, Smith & Associates, Inc.

By: David Leibbrandt Date: 8/11/11

Name: David Leibbrandt

Title: President

Address: 121 SW Salmon, Suite 900, Portland, OR 97204

Telephone: 503-225-9010

Contract No. 30001295Amendment/Change Order No. 2Contract Title: Forest Park Low Tank

CITY OF PORTLAND SIGNATURES:

By: _____
Chief Procurement Officer

Date: _____

By: _____
Elected Official

Date: _____

Approved:

By: _____
Office of City Auditor

Date: _____

Approved as to Form:

APPROVED AS TO FORM

By: _____
Office of City Attorney
CITY ATTORNEYDate: 8/15/2011

Exhibit A
Amendment 2, Contract No. 30001295

1. The Contractor shall perform the following tasks for the indicated rates in addition to tasks noted in the original scope of work and previous amendment. All deliverables shall be provided on a CD in Microsoft Word and PDF format with the drawing files in Microstation or other format that conforms to PWB Computer Aided Drafting (CAD) standards in addition to ten (10) hard copies.

A. Design of Temporary Shoring Systems - \$67,048:

Provide contract documents for the temporary construction shoring system needed during the tank excavation. All elements of the designed shoring system must be located on PWB property.

The contract documents shall be signed and stamped by a registered professional engineer. The contract documents shall include drawings showing the shoring system layout in plan views, cross sections, and details as required to adequately construct the shoring system. The contract documents shall also include specifications. A draft submittal of the contract documents shall be reviewed and commented on by the Portland Water Bureau (PWB) Project Manager or their designee. The Contractor shall incorporate these comments into the final shoring system contract documents.

Prepare and submit construction cost estimates for the proposed shoring system and alternative design scenarios.

Prepare and submit a draft memorandum summarizing shoring system alternatives, their costs, and the Contractors recommendations. The final memorandum shall include comments from PWB.

Attend one meeting with PWB to discuss the preferred shoring system.

B. Temporary Shoring System - \$38,483:

Review and respond to a maximum of four (4) Requests for Information (RFI's) from the construction contractor.

Provide up to six (6) field visits by a geotechnical engineer knowledgeable with the designed shoring system.

C. General Geotechnical Observation Services - \$25,353:

Meet with the Owner and design team to coordinate field visits and testing.

Provide field observations as recommended in the Geotechnical Report by Pacific Geotechnical, dated June 30, 2011 along with any additional requests by the

Exhibit A
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Owner. A maximum limit on field observations is set at 26 part-time field visits (4 hours or less) and 7 full-time field visits (8 hours). Field observation reports shall be submitted to PWB following each visit.

Review and respond to all RFI's associated with geotechnical issues.

Review all design-build elements such as ground improvements, dewatering, and permanent retaining walls.

Prepare and submit a final summary letter to PWB for construction monitoring activities.

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Task Compensation Limits -- Forest Park Low Tank							
Task	Original MSA Expenses	Original Sub Expenses	Amend. 1 MSA Expenses	Amend. 1 Sub Expenses	Amend. 2 MSA Expenses	Amend. 2 Sub Expenses	Total Expenses
Phase A: Project Management							
Task 1 -- Basic Project Management	\$33,390	\$0					\$33,390
Phase A Total							\$33,390
Phase B: Pre-design							
Task B.1-- Computation Fluid Dynamics (CFD)							
Task B1.1 -- Initial Mixing System Analysis Draft Memo	\$1,665	\$45,115					\$46,780
Task B1.3 -- Additional CFD Modeling Memo	\$665	\$6,335					\$7,000
Task B.2 -- Geotechnical Investigation							
Task B2.1 -- Geotechnical Investigations	\$1,218	\$23,900	\$2,987	\$10,658			\$38,763
Task B2.2 -- Final Geotechnical Report	\$1,934	\$10,280					\$12,214
Phase B Total							\$104,757
Phase C: Design							
Task C.1-- Basic Design							
Task C1.1 -- 30% Submittal Package ¹	\$24,355	\$17,517					\$41,872
Task C1.2 -- 60% Submittal Package ²	\$36,875	\$28,275					\$65,151
Task C1.3 -- 90% Submittal Package ³	\$36,875	\$28,275					\$65,151
Task C1.4 -- 100% Submittal Package ³	\$21,550	\$18,017					\$39,567
Task C1.5 -- FINAL Signed Package	\$2,700	\$500					\$3,200
Task C1.6 -- Constructability Review	\$3,271	\$3,150					\$6,421
Task C1.7 -- Assistance During Bidding	\$8,000	\$788			\$2,000	\$3,500	\$14,287
Task C.2 -- Additional Design Services							
Task C2.1 -- Water Quality Review	\$1,200	\$9,500					\$10,700
Task C2.2 -- Architecture Design	\$1,800	\$10,500					\$12,300
Task C2.3 -- Seismic Valve Design	\$3,500	\$500					\$4,000
Task C2.4 -- Downstream Storm Sewer Analysis	\$6,000	\$0					\$6,000
Task C2.5 -- Paving and Storm Drainage for Private Access Road	\$7,500	\$0					\$7,500
Task C2.6 -- Additional cost for alternative buried vault structure	\$1,200	\$9,925					\$11,125
Task C2.7 -- Design of cast-in-place concrete retaining walls	\$1,500	\$15,000					\$16,500
Task C2.8 -- Design of Temporary Shoring Systems					\$15,500	\$46,048	\$61,548
Phase C Total							\$365,323
Phase D: Permitting							
Task D.1-- Basic Permitting							
Task D1.1 -- Type III Conditional Use Permit (from BDS)	\$9,512	\$6,300					\$15,812
Task D1.2 -- Discharge Permit (from BES)	\$3,567	\$0					\$3,567
Task D1.3 -- NPDES 1200-C (from DEQ)	\$2,378	\$0					\$2,378
Task D1.4 -- Building Permit (from BDS) ⁴	\$6,125	\$0					\$6,125
Task D1.5 -- Tree Permit (from City Forester)	\$2,378	\$0					\$2,378
Task D1.6 -- Type II Lot Validation (from BDS)			\$4,890	\$3,360			\$8,250
Phase D Total							\$38,511
Phase E: Assistance During Construction							
Task E.1-- Construction Administration Assistance							
Task E.1-- Construction Administration Assistance	\$15,163	\$8,045					\$23,208
Task E.2-- Construction Observation Assistance							
Task E.2-- Construction Observation Assistance	\$13,919	\$9,962					\$23,881
Task E.3-- Assistance with Shop Drawing Review							
Task E.3-- Assistance with Shop Drawing Review	\$15,099	\$5,266					\$20,365
Task E.4-- Assistance with Substantial Completion and Final Inspection							
Task E.4-- Assistance with Substantial Completion and Final Inspection	\$4,640	\$2,746					\$7,386
Task E.5-- Review O&M manuals							
Task E.5-- Review O&M manuals	\$1,680	\$350					\$2,030
Task E.6-- Assistance with Preparation of Record Drawings							
Task E.6-- Assistance with Preparation of Record Drawings	\$3,600	\$350					\$3,950
Task E.7 -- General Geotechnical Observation Services							
Task E.7 -- General Geotechnical Observation Services						\$25,353	\$25,353
Task E.8 -- Temporary Shoring Systems							
Task E.8 -- Temporary Shoring Systems					\$12,000	\$26,483	\$38,483
Phase E Total							\$144,656
Total All Tasks	\$273,261	\$260,597	\$7,877	\$14,018	\$29,500	\$101,384	\$686,636

Notes:

- 1.) Submittals to Include: Plans, Specifications, Design Memorandum, Cost Estimate, Schedule
- 2.) Submittals to Include: Plans, Specifications, Design Memorandum, Cost Estimate, Schedule, Calculations
- 3.) Submittals to Include: Plans, Specifications, Design Memorandum, Cost Estimate, Schedule, Calculations, Resolution to City's BCOE Comments
- 4.) Building Permit to Include: Electrical, Plumbing, Mechanical, Structural, Other Reviews Part of Building Permit