183794
Exhibit A

AMENDMENT NO. 4

CONTRACT NO. 38089

FOR

River Restoration Program Development

This Contract was made and entered by and between Tetra Tech, 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.

1. This contract is hereby extended through June 30, 2011.

2. Additional work is necessary as described in the Scope of Work attached as Exhibit A and as follows: finalize the model that will be used to assess impacts to natural resources per direction from an independent science panel; finalize the cost recovery pricing memo that will serve as the basis for the in lieu fee charges; complete the mitigation banking prospectus and prepare portions of the mitigation banking instrument; and develop 30% design restoration plans for the two mitigation sites that will be included in the mitigation banking instrument.

3. Additional compensation is necessary and shall not exceed $100,000.

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.

Tetra Tech

By: _____ Date: 5-12-10

Name: David Munro

Title: Office Manager

Address: 1020 SW Taylor St., Suite 530, Portland OR 97205

Telephone: 503-223-5388, ext. 112

Contract No. 38089 Amendment/Change Order No. 4

Contract Title: River Restoration Program Development

CITY OF PORTLAND SIGNATURES:

By: _____ Date: _____
Chief Procurement Officer

By: _____ Date: _____
Elected Official

Approved:

By: _____ Date: _____
Office of City Auditor

Approved as to Form:

By: _____ Date: 5/13/10
Office of City Attorney

APPROVED AS TO FORM
CITY ATTORNEY

EXHIBIT A: STATEMENT OF WORK

Task 1: UPDATE ACCOUNTING AND CREDITING SYSTEM

1.1 Habitat Evaluation Procedure (HEP) Development

1.1.1 HEP Development

The Upland Grassland modified HEP model will be developed through the use of existing models as well as the development of two new Habitat Suitability Index (HSI) models for local species of interest with the assistance of the best available science found in the scientific literature.

The Riverine HEP model will be modified to include coho and lamprey species, which will involve the development of new HSI models for these species.

1.1.2 Meetings

Tetra Tech will attend one meeting with City staff to present the results of the model.

HEP Development Deliverables:

- *Development of an Upland Grassland model*
- *Revised Riverine model*

1.2 Science Review Panel Comment and Revisions to the HEP Model

1.2.1 Meeting

Attend one meeting with the science review panel created by the City to answer questions and receive written comments.

1.2.2 Revisions to HEP Model

Assist the city with addressing the comments of the science review panel and make appropriate edits to update the HEP. Present final model and scenarios at a stakeholder meeting

Science Review Panel Revision Deliverables:

- *Meeting to discuss model and receive comments*
- *Revised HEP Model Technical Memo*

Task 2: COST RECOVERY PRICING

2.1 Revise Cost Recovery Pricing Memo

2.1.1 Revise Costs and Conceptual Designs

Tetra Tech will revise the cost recovery pricing memo per comments and revisions requested by the City.

2.1.2 Final Revisions of Costs and Conceptual Designs

Final comments and revisions will be made to the cost recovery pricing memo per the City's final review and comments. Present costs at a stakeholder meeting.

Cost Recovery Pricing Deliverables:

- *Revised Cost Recovery Pricing Technical Memo*
- *Final Cost Recovery Pricing Technical Memo*

Task 4: COMPLETE THE PROSPECTUS FOR THE CITY OF PORTLAND'S RIVER RESTORATION PROGRAM

4.1 Completion of the Revised Prospectus

4.1.1 Revise Draft Prospectus

Tetra Tech will revise the draft prospectus to include changes made to the program since the last version was completed.

4.1.2 IRT Meeting

Tetra Tech will attend a meeting with the City and IRT to review the revised draft prospectus within 30 days from the delivery of the document.

4.1.3 Final Prospectus

Tetra Tech will assist the City to finalize the public draft prospectus per the suggestions of the IRT.

Certification Process Deliverables:

- *Draft Revised Prospectus*
- *Meeting with Inter-agency Review Team*
- *Final Revised Prospectus for public review*

Task 5: PRE-DESIGN PHASE FOR THE RESTORATION OF TWO NORTH REACH WILLAMETTE RIVER SITES: WILLAMETTE COVE AND SWAN ISLAND LAGOON

5.1 Project Management.

5.1.1 Project Schedule

Develop and maintain the design schedule. The schedule will outline all tasks required of the consultant to develop, program and design the project.

5.1.2 Meetings and Updates

Communicate by phone and e-mail with BES PM on an as-needed basis.

Participate in two meetings with the BES PM and project team and consultant staff as required. Meetings will be held either at the City of Portland building or the consultant's office. Prepare agendas, necessary visual aids to facilitate meeting presentations and discussion, and written meeting summaries.

Provide monthly e-mail status reports including updated budget, schedule, and summary of work completed during the billing period, work anticipated in the next billing period, status of deliverables, hours and costs spent to date by task (with percent complete and percent invoiced), and a discussion of problems and proposed corrective actions.

Project Management Deliverables:

- *Project schedule and monthly updates*
- *Project budget and monthly updates*
- *Meeting agendas and summaries to be submitted within 3 business days.*

5.2 Project Kickoff and Data Collection

5.2.1 Kickoff Meeting and Site Visit

A project kickoff meeting will be held with consultant's key design team and BES's project team to review the project approach, issues and constraints, schedule and milestones, deliverables, design decision strategy, and confirm what activities will be self-performed by BES. BES will provide all available background materials to review in Task 2.2. After the in-office meeting, visit the project sites and discuss issues and constraints.

5.2.2 Review Existing Data

Review existing data in order to understand project needs and to identify any additional data collection needed for pre-design. Materials provided by BES include, but are not limited to:

- LiDAR data
- GIS layers for major utilities
- Historic photos and maps
- FEMA mapping
- City of Portland Natural Resources Inventory (NRI)
- DEQ Environmental Cleanup Site Information (ECSI) data and other available information on contaminated media on the sites.
- Existing hydraulic models
- Survey reports and data
- Geotechnical reports and data
- Environmental Site Assessment
- HTRW reports and data
- Stage frequency analysis

Consultant will summarize findings that relate to project pre-design and data needs based on the review of existing data in a brief memorandum.

5.2.3 Investigate Existing Conditions

In order to detail existing conditions at the two sites, additional data that is not supplied by the City will be collected based on the needs found by Task 2.2. Additional data needs are anticipated in, but not limited to, the following categories:

- Survey Data
    - Consultant will work with BES PM to develop field survey data request to supplement available LiDAR data. Additional information may include topography and bathymetry. Survey will be performed by City.
- Level 1 Environmental Site Assessment
    - The City will perform additional sampling, including soil sampling, if required.
- A Biological and Habitat Assessment including a vegetation and wetlands survey
- Geotechnical Survey of literature and existing data will be conducted
    - Consultant will assist the City in identifying additional geotechnical data needed.

Two technical memos presenting the exiting conditions at each site will be produced from this investigation that will include a "fatal flaw" analysis.

Investigate Existing Conditions Phase Deliverables:

- *Kickoff meeting and site visit summary memo*

- *Two Existing Conditions Technical Memos. Draft electronic copy (Microsoft Word and pdf) of memo and request for additional information will be submitted within 2 weeks of receiving material. Final electronic copy of a memo responding to comments on the draft will be submitted within 2 weeks of receipt of the comments.*

5.3 Alternatives Analysis

5.3.1 Alternatives Analysis

Concept level alternatives will be developed at a design charrette meeting with the assistance of the City and will be evaluated for habitat features at each project site. Pros and cons of these features will be evaluated to optimize restoration effectiveness for the selected alternative design. Preliminary costs and quantities will be developed for the alternatives. The selection criteria will include costs, schedule, O&M, pubic acceptance, stakeholder coordination, and other relevant factors.

5.3.2 Meeting to Review Alternatives

A meeting will be held with the City to present the conceptual alternatives and select a preferred alternative for each site. One selected alternative will be carried forward to 30% design.

Two technical memos that discusses the project objectives, results and benefits at each site and outlines the alternatives and the selected alternative at each site will be produced.

Alternatives Analysis Phase Deliverables:

- *Meeting to develop alternative concepts with the City.*
- *Presentation of Alternatives to City*
- *Two Alternatives Analysis Technical Memos. Electronic copy (Microsoft Word and pdf) of memo will be submitted.*

5.4 30% Design Phase Services

5.4.1 Draft 30% Design Drawings and Design Reports

Prepare the 30% design drawings and preliminary design reports for the selected alternative for both sites.

30% design drawings will include (Approximately 6 sheets per site):

Title Sheet /Sheet Index/Project Location/Vicinity Map
Legend/Abbreviations/Notes
Site Plan with basemap
Typical Sections
Habitat Feature Details

Revegetation Plan Sheet

The preliminary design reports will include:

- Project location and background
- Summary of existing conditions
- Summary of alternatives analysis and selected alternative
- Summary of the geological and geotechnical conditions
- Summary of the environmental conditions
- Summary of hydrology and hydraulics (H&H will be analyzed to update stage frequency data and determine elevations of habitat features)
- Summary of issues to be addressed or resolved in the design and/or construction
- Design criteria for final design
- Data gaps
- Revegetation plan
- Utility impacts
- Permitting requirements and schedule
- Risk identification
- 30% level cost estimate
- 30% level construction schedule and any phasing of implementation
- Constructability including construction access, easements required, acquisition to consider, and feasible method of construction
- Identification of acquisition and easement needs

5.4.2 30% Review Meeting

A meeting will be held to review the City's comments of the draft 30% design drawings and preliminary design report. The City's PM will distribute to stakeholders prior to meeting and will consolidate comments to be addressed in Task 4.3.

5.4.3 Final 30% Design Drawings and Preliminary Design Report

Edits and revisions will be made to the draft drawings and reports based on comments received from the City.

30% Design Phase Deliverables:

- *Two Draft 30% Design Drawing Sets and Two Preliminary Design Reports, one for each site (Electronic MS Word & pdf files, 3 hard copies drawings half-size 11"x17", 1 hard copy drawings 22"x34" – full size)*
- *Two Final 30% Design Drawing Sets and Two Preliminary Design Reports, one for each site (Electronic MS Word & pdf files, 3 hard copies drawings half-size 11"x17", 1 hard copy drawings 22"x34" – full size), Electronic AutoCAD files)*

Task 6: PREPARE A DRAFT OF THE BANKING INSTRUMENT FO THE CITY OF PORTLAND'S RIVER RESTORATION PROGRAM

6.1 Preparation of a Draft of the Banking Instrument

6.1.1 Meetings

Tetra Tech will have a scoping meeting with City staff to review the banking instrument goals and objectives and plan for its development. A plan will be developed to prioritize the sections of the Instrument that will be completed within the available budget.

A second meeting will be held to review the completed draft sections.

6.1.2 Completion of a Draft of Specific Sections of the Banking Instrument

Tetra Tech will complete specific sections of the draft banking instrument as identified in the scoping meeting. The banking instrument sections are outlined and defined below. The selection of the sections will be determined by the priorities of the City's process and availability of required information.

Objectives – The City will develop a qualitative and quantitative description of the types of the various resources and amount of each type of resource that will be created.

Site Selection – The draft MBI will describe the site selection process and assess the feasibility of restoring or constructing wetlands at each proposed site. Feasibility assessment will include, at minimum: review of land ownership, possible HTRW issues, ability to maintain necessary hydrologic features, construction access.

Site Protection – In this section, the City will describe the specific legal documents, including site ownership documentation that will be used to ensure long-term protection (conservation easements or deed restrictions) of the site. To complete this section, the City will describe how it will acquire land ownership or easement of all initial sites and will complete a Property Protection Instrument which will describe real estate provisions to ensure permanent protection.

Baseline Information – This section will describe the hydrology, plant communities, soil conditions, wildlife habitat, and functions and values of each site. The purpose of providing this information is to show that due diligence has been performed in calculating potential ecological lift that could occur from the restoration or enhancement actions that are proposed at each site. The City will need to perform field surveys, existing data assessment, and a literature review to complete this task. Due diligence studies may include a wetland delineation, contaminant site assessments, listed species habitat surveys, hydrological analysis, and vegetation inventory, and a functional assessment.

Determination of Credits – This section will describe what each credit is worth and the number of credits to be provided at each site. This section will also describe the methods for calculating the worth of a given credit, how credits were determined for sites with multiple habitat sites, and how the value of impacted areas (areas for which mitigation credits will be required) will be determined.

Crediting and Debiting Procedure: City finalizes crediting and debiting system which includes the credit release schedule. A credit ledger is also developed.

Mitigation Work Plan -- A description of the restoration actions that will occur at each project site including the boundaries, grading plan, sequencing, source of water, planting plan, etc. This plan typically is supported by a set of design documents that include conceptual plans, site plans, and materials supporting permitting.

Provisions for Long-term Maintenance – This section will consist of a description and schedule of required maintenance actions, and name the entities that will be responsible for long-term maintenance. If the City has formed partnerships with any organizations for long-term maintenance, the partnerships should be described here.

Performance Standards – The City will develop ecology-based standards that include improved site functioning and provide benchmarks for determining that the project is progressing toward meeting the objectives.

Monitoring Requirements – This section will describe how the site will be monitored to determine that the mitigation project is on track to meet performance standards.

Long-term Management Plan – This section will describe how the mitigation sites will be managed after performance standards have been met and how management will ensure the long-term sustainability of the site. If the site is proposed for transfer to a different entity for long-term management, a copy of the agreement between the City and the management entity must be attached.

Financial Assurances: City secures funding of the Bank and develops financial assurances to ensure that the Bank will be constructed, monitored, and maintained in accordance with the MBI. This section must describe how the financial assurances are sufficient to ensure a high level of confidence that the compensatory mitigation project will be successfully completed, in accordance with its performance standards.

Mitigation Banking Instrument Draft Deliverables:

- *Meeting to scope this phase with the City.*
- *Draft of Select Sections of the Banking Instrument (Electronic copy (Microsoft Word and pdf) of draft will be submitted)*

COST PROPOSAL
TETRA TECH, INC.
PROJECT: North Reach River Restoration Program

TASK	QA/QC Staff *$151.00*	PM/ Biologist *$90.00*	GIS/CAD Technician *$75.00*	Planner *$151.00*	Engineer *$125.00*	Admin *$60.00*	LABOR SUBTOTAL
Task 1 Update Accounting and Crediting System							
1.1 HEP Development and Revision	4	60				2	$6,124.00
1.2 Meetings		4					$360.00
2.1 Meeting with Science Review Panel		8					$720.00
2.2 Revisions to the HEP Model	4	40				2	$4,324.00
Task 2 Cost Recovery Pricing							
1.1 Revised Tech Memo		4	24		8	2	$3,280.00
1.2 Final Tech Memo	4	4	16		4	2	$2,784.00
Task 4 Complete Prospectus							
1.1 Revise Draft Prospectus	4	40				2	$4,324.00
1.2 IRT Meeting		8				4	$960.00
1.3 Final Prospectus	4	40				4	$4,444.00
Task 5 30% Design for Two Sites							
1.1 Project Management		16					$1,440.00
1.2 Project Meetings and Updates		20					$1,800.00
2.1 Kickoff Meeting and Site Visit	4	8	8		8	2	$3,044.00
2.2 Review Existing Data		8	8		8	2	$2,440.00
2.3 Investigate Existing Conditions	8	20	40		20	2	$8,628.00
3.1 Alternatives Analysis	4	20	40		20	4	$8,144.00
3.2 Meeting to Review Alternatives		12			12	4	$2,820.00
4.1 Draft 30% Design Drawings and Design Report	4	40	100		60	8	$19,684.00
4.2 30% Review Meeting		8			8	2	$1,840.00
4.3 Final 30% Design Drawings and Design Report	4	20	20		20	8	$6,884.00
Task 6 Banking Instrument							
1.1 Meetings	4	8					$1,324.00
1.2 Draft Sections of the Banking Instrument	8	100		20		2	$13,348.00
Subtotal	***56***	***488***	***256***	***20***	***168***	***52***	

TOTAL FEE ESTIMATE	**$98,716.00**

Labor Subtotal	$98,716.00
Travel	$100.00
Materials (letters, postage, handouts, copies, computer etc.)	$1,000.00
TOTAL	**$99,816.00**