AMENDMENT NO. 5

CONTRACT NO. C38089

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, 2012.
- 2. Additional work is necessary as described in the Scope of Work attached as Exhibit A as follows:

Task 2 Cost recovery pricing

This task includes updating the sites and estimates included in the report "How to calculate River Plan / North Reach in lieu fees" (November 2010).

Task 5 30% Design for Swan Island Beaches

This task involves finalizing the 30% design for the Swan Island Beaches restoration site.

3. Additional compensation is necessary and shall not exceed \$13,081.09.

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		
ву:	Date:_	5-9://
Name: David Munro		
Title: Office Manager		
Address: 1020 SW Taylor St, Suite 530, Portland OR 97205		

Telephone: 503-223-5388, ext 112

Contract	No <u>. C38089</u>		Amenament/Cr	nange Order No.	
Contract	Title: River Restorat	ion Program Development			
CITY OF	PORTLAND SIGNA	TURES:			e e
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By:	Sam Adams Mayor of Portland		v v	Date.	gallande and a state of the sta
Approved	1:				
Ву:	Office of City Audito	or APPROVED AS TO FO		Date:	
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By:	Office of City Attorn	CITY ATTORNEY	0 11	Date:	1/2011

EXHIBIT A: SCOPE OF WORK

Task 2: COST RECOVERY PRICING

2.1 Revise Cost Recovery Pricing Memo

2.1.1 Meetings

Participate in two meetings with BES and BPS to discuss revisions to the pricing memo

Participate in two meetings with each site's landowner and BES (up to six landowners) to discuss the landowners' intention for each site

Participate in one public meeting to provide technical information to stakeholders

Project Management Deliverables:

- Meeting agendas will be developed upon request and meeting notes will be submitted within 3 business days.
- Create visuals for a technical presentation to be presented at the Public Meeting

2.1.2 Develop and Revise Conceptual Designs

Tetra Tech will develop the conceptual design for two new sites: Swan Island Beaches and one site to be determined.

Tetra Tech will revise the concept designs for five sites including: MarCom, University of Portland, Willamette Cove, Doane Creek, and Miller Creek

2.1.3 Revise Cost Recovery Pricing Memo

Revise the values of average Functional HEA uplift per habitat type with the assistance of the City and describe in the report how these determinations were made

Produce new cost estimates for the two new sites and the five revised sites

Draft and final revisions will be produced with an average of 2. 5 iterations per site concept design

Cost Recovery Pricing Deliverables:

 Draft Conceptual Designs and Cost Estimates (Electronic pdf and Excel files, 3 hard copies drawings half-size 11"x17")

- Final Conceptual Designs and Cost Estimates (Electronic pdf and Excel files, 3 hard copies drawings half-size 11"x17")
- Revised Cost Recovery Pricing Technical Memo (Electronic MS Word & pdf files, 3 hard copies drawings half-size 11"x17")
- Final Cost Recovery Pricing Technical Memo (Electronic MS Word & pdf files, 3 hard copies drawings half-size 11"x17")

Task 5: PRE-DESIGN PHASE FOR THE RESTORATION OF A NORTH REACH WILLAMETTE RIVER SITE: SWAN ISLAND BEACHES

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 Site Visit of Expanded Swan Island Beaches Site

A site visit will be conducted to view the expanded site and to include the Port personnel to discuss issues and constraints at the site.

5.2.2 Review Existing Data (task complete)

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 site, 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.
- Investigate requirements for modifications to the Greenway Trail

The consultant will prepare a technical memo describing the existing conditions at the site and a "fatal flaw" analysis.

Investigate Existing Conditions Phase Deliverables:

- Kickoff meeting and site visit summary memo
- A Existing Conditions Technical Memo. 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 the Port of Portland (Port) and will be evaluated for habitat features at the 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. In addition an on-site Functional HEA evaluation will be conducted to assess the existing habitat condition at the site using the City's revised Functional HEA model. Projected habitat conditions will be scored for each alternative to determine the uplift each will have at the site. The selection criteria will include feasibility, costs, Functional HEA score, schedule, O&M, public acceptance, Port contribution, stakeholder coordination, and other relevant factors.

5.3.2 Meeting to Review Alternatives

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

A technical memo that discusses the project objectives, results and benefits and outlines the alternatives and the selected alternative will be produced.

Alternatives Analysis Phase Deliverables:

- Meeting to develop alternative concepts with the City and the Port.
- Presentation of Alternatives to the City and the Port.
- A Draft and Final Alternatives Analysis Technical Memo. 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 Report

Prepare the 30% design drawings and preliminary design report for the selected alternative.

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 report 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 report based on comments received from the City.

30% Design Phase Deliverables:

- Draft 30% Design Drawing Set and Preliminary Design Report, (Electronic MS Word & pdf files, 3 hard copies drawings half-size 11"x17", 1 hard copy drawings 22"x34" full size)
- Final 30% Design Drawing Set and Preliminary Design Report, (Electronic MS Word & pdf files, 3 hard copies drawings half-size 11"x17", 1 hard copy drawings 22"x34" full size), Electronic AutoCAD files)

Amendment 5 Budget TETRA TECH, INC.

PROJECT: North Reach River Restoration Program

	QA/QC	PM/	GIS/CAD	F	A alamatan	LABOR
TASK	\$151.00	\$90.00	Technician \$75.00	Engineer \$125.00	Admin \$60.00	LABOR SUBTOTAL
Task 2: Cost Recovery Pricing	\$131.00	\$90.00	\$75.00	\$125.00	\$00.00	SUBTUTAL
2.1.1 Meetings with Landowners, the City, and a Public Meeting		52		8	4	\$5,920.00
2.1.2 Revised Conceptual Designs	2	12	50	20	4	\$7,872.00
2.1.2 Nevised Conceptual Designs 2.1.2 Develop Conceptual Design for Two New Sites	2	8	32	16		\$5,422.00
2.1.3 Revise Costs	<u></u>	8	28	20		\$5,320.00
2.1.3 Revise Table		2	20	20		\$180.00
2.1.3 Draft Memo	2	16	16	16	4	\$5,182.00
2.1.3 Final Memo	2	16	8	8	4	\$3,582.00
Subtotal	8	114	134	88	16	\$33,478.00
Task 5: 30% Design for Swan Island Beaches						
5.1 Project Schedule and Project Meetings and Updates		16		8		\$2,440.00
5.2.1 Site Visit		4		4		\$860.00
5.2.3 Investigate Existing Conditions	2	16	32	16	2	\$6,262.00
5.3.1 Alternatives Analysis	2	24	40	24	4	\$8,702.00
5.3.2 Meeting to Review Alternatives		. 8		8	4	\$1,960.00
5.4.1 Draft 30% Design Drawings and Design Report	4	16	80	40	8	\$13,524.00
5.4.2 30% Review Meeting		8		8	2	\$1,840.00
5.4.3 Final 30% Design Drawings and Design Report	2	16	20	12	8	\$5,222.00
Subtotal	10	108	172	120	28	\$40,810.00
Subtotal	18	222	306	208	44	\$74,288.00

TOTAL FEE ESTIMATE		\$74,288.	00

Labor Subtotal	\$74,288.00
Travel (rental car for six meetings)	\$300.00
Materials (letters, postage, handouts, copies, computer etc.)	\$200.00
TOTAL	\$74,788.00

Remaining Budget	\$61,706.	91
Additional Budget Requested	\$13,081	.09