WHATCOM COUNTY CONTRACT INFORMATION SHEET

Whatcom County Contract No. **201803009-2**

Originating Department:	Public Works				
Division/Program: (i.e. Dept. Division and Program)	River and Flood/907525 - CFHMP				
Contract or Grant Administrator:	Paula Harris				
Contractor's / Agency Name:	Herrera Environmental Consultants				
Is this a New Contract? If not, is this an Amendment or Renewal to an Existing Contract? Yes O No O If Amendment or Renewal, (per WCC 3.08.100 (a)) Original Contract #: 201803009					
Does contract require Council Approval? Yes O No O Already approved? Council Approved Date:	If No, include WCC: (Exclusions see: Whatcom County Codes 3.06.010, 3.08.090 and 3.08.100)				
Is this a grant agreement? Yes O No O If yes, grantor agency contract	,				
Is this contract grant funded? Yes O No O If yes, Whatcom County grant contract number(s): 201803002					
Is this contract the result of a RFP or Bid process? Yes No No If yes, RFP and Bid number(s): 17-	Contract Cost Center: 718003				
Is this agreement excluded from E-Verify? No • Yes (If no, include Attachment D Contractor Declaration form.				
If YES, indicate exclusion(s) below: Professional services agreement for certified/licensed professional. Contract work is for less than \$100,000. Contract work is for less than \$120 days. Interlocal Agreement (between Governments). Work related subcontract less than \$25,000. Public Works - Local Agency/Federally Funded FHWA. Public Works - Local Agency/Federally Funded FHWA. Contract Amount: (sum of original contract amount and any prior amendments): 189,000.00					
strategies for flood risk reduction with the needs of salmon and floodplain land uses. The update will provide a basis for future Flood Control Zone District capital programs and support an update to the WRIA1 Salmon Recovery Plan.					
Contract Routing: 1. Prepared by: Deb Johnson	Expiration Date: 09/30/21				
2. Attorney signoff: Christopher Quinn	Date: 10/07/19 Date: 10/08/19				
3. AS Finance reviewed: M Caldwell	Date: 10/08/19				
4. IT reviewed (if IT related):	Date:				
5. Contractor signed:	Date:				
6. Submitted to Exec.:	Date:				
7. Council approved (if necessary):	Date:				
8. Executive signed:	Date:				
9. Original to Council:	Date:				

AMENDMENT NO. 2

TO

CONTRACT FOR SERVICES BETWEEN WHATCOM COUNTY FLOOD CONTROL ZONE DISTRICT AND HERRERA ENVIRONMENTAL CONSULTANTS

THIS AMENDMENT is to the Contract between the Whatcom County Flood Control Zone District, hereinafter referred to as the "County", and Herrera Environmental Consultants, a consulting company hereinafter referred to as the "Contractor", dated March 19, 2018, and designated "Whatcom County Contract No. 201803009". In consideration of the mutual benefits to be derived, the parties agree to the following:

WITNESSETH

WHEREAS, the County has entered into an agreement with the Contractor dated March 19, 2018, to assist in updating and broadening the scope of the 1999 Lower Nooksack River Comprehensive Flood Hazard Management Plan (CFHMP) in the amount of \$39,000; and

WHEREAS, the County amended the original Contractor agreement on August 22, 2018 (Amendment No. 1) to provide additional services for ongoing support and assistance through the middle of 2019 and increase the agreement amount by \$150,000; and

WHEREAS, the County extended the amended contract as the budget was sufficient to provide for services through September 2019; and

WHEREAS, the Contractor is helping to guide the planning process in close coordination with the Floodplain Integrated Planning (FLIP) Steering Committee and Whatcom County staff; and

WHEREAS, additional specific support needs have been identified to further the work of the FLIP Steering Committee and to support the broader stakeholder group engaged in the FLIP process; and

WHEREAS, the initial technical assessments of existing geomorphic and habitat conditions in the lower Nooksack conducted by different contractors are complete and their contracts have been fully expended; and

WHEREAS, the County desires to have the technical expertise of the people who completed these assessments available to the FLIP Steering Committee and larger stakeholder group to assist in planning at the reach scale and conceiving of project alternatives and has requested that they be included as subcontractors in this amendment; and

WHEREAS, The County has a grant through the Environmental Protection Agency (EPA) National Estuary Program (NEP) to support the work under this amendment; and

WHEREAS, the Contractor has delivered a quality product and has been responsive thus far to the County's needs; and

WHEREAS, the County has requested the Contractor to perform additional services and desires to revise the scope of work, contract amount and contract expiration date.

NOW, THEREFORE, County and Contractor agree to modify the Agreement as follows:

SCOPE OF SERVICES

The scope of services is amended to include the additional Scope of Services described in Exhibit A-2, attached hereto and incorporated herein by reference.

2. PERFORMANCE

As consideration for the services provided by the Contractor, the County agrees to reimburse the Contractor for additional services rendered under this amendment at a sum not to exceed \$404,200 DOLLARS based on the cost breakdown detailed in Exhibit B-2, attached hereto and incorporated herein by reference. The revised contract amount is \$593,200.

3. TIME SCHEDULE

The duration of this Agreement shall be extended to September 30, 2021.

This Amendment shall be made part of W.C. Contract No. 201803009 by and between Whatcom County Flood Control Zone District and Herrera Environmental Consultants. Unless specifically stated herein, all other terms and conditions of the original agreement shall remain in full force and effect.

IN WITNESS WHEREOF, Amendment on the date and	-	Environmental	Services	have	executed	this
DATED this	day of	_, 2019.				

CONTRACTOR INFORMATION:

Herrera Environmental Consultants 2200 Sixth Avenue, Suite 1100 Seattle, WA 98121

Contact Name: Mark Ewbank Contact Phone: (206) 787-8266 Contact FAX: (206) 441-9108

Contact Email: mewbank@herrerainc.com

CONTRACTOR:

Herrera Environmental Consultants

Mayle my Mark Ewbank, Vice President

STATE OF WASHINGTON

COUNTY OF Snohomish

On this $\underline{\mathcal{S}}$ day of $\underline{\mathcal{O}\mathcal{C}\mathcal{C}\mathcal{D}\mathcal{C}}$, 2019, before me personally appeared Mark Ewbank to me known to be the Vice President of Herrera Environmental Consultants and who executed the above instrument and who acknowledged to me the act of signing and sealing thereof.

> NOTARY PUBLIC in and for the State of Washington, residing at Mullito, wt. My commission expires

WHATCOM COUNTY FLOOD CONTROL ZONE DISTRICT:
Recommended for Approval:
Jon Hutchings, Public Works Director Date
Approved as to form:
Christopher Quinn, Prosecuting Attorney Date
Approved: Accepted for Whatcom County Flood Control Zone District:
By: Jack Louws, Whatcom County Executive, acting for the Whatcom County Flood Control Zone District Board of Supervisors
STATE OF WASHINGTON)
) ss COUNTY OF WHATCOM)
On this day of, 2019, before me personally appeared Jack Louws, to me known to be the Executive of Whatcom County, who executed the above instrument and who acknowledged to me the act of signing and sealing thereof.
NOTARY PUBLIC in and for the State of Washington, residing at My commission expires

Exhibit A-1 Scope of Work

I. Background

Whatcom County is preparing a major update to its Comprehensive Flood Hazard Management Plan for the Lower Nooksack River, encompassing approximately 36 miles of the river from the confluence of the North and South forks near Deming to the river mouth in Bellingham Bay. The plan update is a collaborative effort with affected governments and stakeholders representing these interests. Reach-scale floodplain management strategies and project concepts will be developed for actions that reduce flood risk, advance salmon habitat protection and restoration, and provide for restored habitat processes to the extent practicable, while sustaining adjacent floodplain land uses. A consultant team led by Herrera Environmental Consultants (Herrera) is assisting the County in this integration effort, including alternatives analyses, outreach and coordination with planning participants, conceptual engineering design, and plan compilation. This scope of work describes additional services that the Herrera team will provide through September 2021 to continue coordinating with the Nooksack River Floodplain Integrated Planning Team (FLIP Team) and the FLIP Steering Committee, and integrating input from a habitat assessment, geomorphic assessment, hydraulic analysis and floodplain mapping, costbenefit analysis, and stakeholder outreach, and results of a concurrent Reach 1 study being led by the USGS.

The scope of work supplements the work described in Whatcom County contract #201803009, authorized on March 19, 2018, and in Amendment 1 to the original contract, dated August 22, 2018.

II. Statement of Work

Herrera and its subconsultants Cramer Fish Sciences, Applied Geomorphology, Northwest Hydraulic Consultants, Wheeler Consulting Group, and Watershed Science and Engineering will perform the services described in the following tasks. Adjustment in the focus and level of effort may be needed as task work proceeds in coordination with County staff and the FLIP Steering Committee to provide the most value. Some of the tasks in this amendment are being increased in scope and budget from the original agreement (and as amended per Amendment 1) and some are new tasks; the task numbering used in this amendment reflects this.

Task 1 - Project Management

Herrera's project manager will attend two to three check-in meetings each month (usually via teleconference) through September 2021 with Whatcom County's project manager and other County staff involved in the floodplain planning effort to discuss progress of the work described in subsequent tasks in this scope of work, preparation for upcoming Steering Committee meetings, direction of the overall planning effort, schedule, and other emerging technical work needs. This amended task includes time for subconsultants to assist with project management coordination as may be needed. This amended task also includes administrative project management work (monthly invoicing, assisting with project schedule updates, and coordination of active task work) for the period of October 2019 through September 2021.

Task 1 Deliverables:

- Monthly invoices and progress reports
- Notes from project management check-in meetings as applicable
- Project schedule input

Task 2 - Background Information Review

No further work under Task 2 for Amendment No. 2.

Task 3 – FLIP Steering Committee Coordination and Integrated Work Planning

Task 3.1 – FLIP Steering Committee Coordination

Herrera's project manager will attend meetings with the FLIP Steering Committee to strategize content to bring to subsequent FLIP Team meetings, discuss input provided by the FLIP Team to date, and define technical work that may need to be done by the Herrera consultant team to feed into future FLIP Team meetings and/or project documentation. Herrera will assist Whatcom County's project manager in preparing meeting agendas and "briefing sheets" for selected agenda content sent to Steering Committee meetings in advance of meetings. This task covers Steering Committee meetings for the months of November 2019 through September 2021 and concurrent activities in those months to coordinate on action items with other Steering Committee members.

Task 3.1 Assumptions:

- Up to twelve (12) meetings are anticipated between November 2019 and September 2021. These will each be convened at County offices in Bellingham, and will typically be 4 hours in duration.
- Herrera's project manager will contribute to notes of each meeting, which County staff will have lead responsibility for preparing.

Task 3.1 Deliverables:

- Edits to draft meeting agendas
- Briefing sheets for agenda topics as requested
- Meeting notes content (tracked edits in Microsoft Word files)

Task 3.2 - Integrated Work Plan Preparation

No further work under Task 3.2 for Amendment No. 2.

Task 3.3 – Integrated Floodplain Planning

A key part of the work to integrate findings of the geomorphic assessment, habitat assessment, USGS studies, flood modeling, and land use assessment will be synthesizing technical information to define where there are distinct problems and potential future floodplain management opportunities to enact meaningful change at the reach and subreach scale to reduce flooding, improve habitat, and enable viable land uses in the floodplain. This subtask may include, but not be limited to, the following work:

- GIS model "heat mapping" to identify geographic areas to focus in
- Online story map preparation and updates to share project information with the FLIP Team and general public
- Technical coordination meetings among the project team
- Conceptual design development, including cost estimating

Task 3.3 Assumptions:

• Conceptual designs of candidate projects will consist of GIS-based plan view figures showing the extent of the conceptual project features and a corresponding narrative of those features. Cost estimating for conceptual projects will be based mainly on past experience with comparable projects rather than developing itemized cost estimates.

Task 3.3 Deliverables:

- Meeting agendas and meeting notes.
- Presentation slides containing information from the items listed above, for meetings with the FLIP Steering Committee.
- Heat mapping results in web map form.
- Online story map.
- Draft reach- and subreach-scale maps showing locations of potential projects and other
 actions to address reach-scale objectives, and a companion table that briefly describes the
 projects/actions.
- Conceptual plans and cost estimates for a variety of floodplain management capital projects.
- Technical memo(s) on specific research or analysis topics.

Task 3.4 – Habitat Assessment Integration

Cramer Fish Sciences (CFS) will provide restoration strategy synthesis technical support to the FLIP technical team and/or the WRIA 1 Salmon Recovery Staff Team, including recommended revisions to draft synthesis products. CFS will also assist in the evaluation of salmon benefits/impacts for project alternatives identified through the reach planning process. This task work also includes CFS' project management work (such as coordinating schedule for CFS input, monthly invoicing and progress reporting, maintenance of project files, etc.). Herrera and the County will concur with CFS on all task work to be completed and then authorize the work in writing (such as emails) before CFS undertakes any additional work not previously authorized.

Task 3.4 Deliverables:

- To be determined by Whatcom County, in writing, as needs arise.
- Monthly invoices and progress reports.

Task 3.5 - Hydraulic Analysis and Modeling Support

Northwest Hydraulic Consultants will provide technical services, under direction from Herrera and the County, in assisting with the FLIP process. Task work may include data review, hydraulic modeling coordination with others performing the modeling work, floodplain mapping, technical analyses, documentation, and coordination with other technical disciplines. This task work also includes NHC's project management work (such as coordinating schedule for NHC input, monthly invoicing and progress reporting, maintenance of project files, etc.). Herrera and the County will concur with NHC on all task work to be completed and then authorize the work in writing (such as emails) before NHC undertakes any additional work not previously authorized.

Task 3.5 Deliverables:

- To be determined by Whatcom County, in writing, as needs arise.
- Monthly invoices and progress reports.

Task 3.6 - Geomorphology Support for Integrated Planning

Applied Geomorphology, Inc. (AGI) will support the project team's integrated planning work with additional geomorphic analyses and documentation as may be needed. This subtask work may include, but not be limited to, the following, to be adapted within the available subtask budget:

- Site specific analyses for certain areas (migration rates, bar turnover, etc.)
- Integration of new datasets into geomorphic analysis
- Evaluation of geomorphic implications of conceptual design plans
- Preparation of technical memo(s) documenting additional analysis

This task work also includes AGI's project management work (such as coordinating schedule for AGI input, monthly invoicing and progress reporting, maintenance of project files, etc.). Herrera and the County will concur with AGI on all task work to be completed and then authorize the work in writing (such as emails) before AGI undertakes any additional work not previously authorized.

Task 3.6 Deliverables:

- To be determined by Whatcom County, in writing, as needs arise.
- Monthly invoices and progress reports.

Task 4 – FLIP Team Meetings

Herrera consultant team lead staff will attend FLIP Team meetings, inclusive of reach-scale meetings with a subset of the FLIP Team, in the time frame of November 2019 through September 2021. In addition to contributing to notes of each meeting, Herrera consultant team participants will assist in presenting information on the integrated planning process and other technical work being done by the Herrera team, as requested.

Task 4 Assumptions:

- Herrera consultant team members will attend up to twelve (12) reach-specific meetings with a subset of the FLIP Team between December 2019 and September 2021. These meetings will occur in Bellingham or otherwise within the project area, and will typically be 4-5 hours in duration.
- Herrera consultant team members will prepare presentation material and other information as needed to guide reach team meetings and contribute to notes of each meeting in collaboration with County staff.

Task 4 Deliverables:

- Reach team meeting agendas.
- Assistance in drafting FLIP Team and reach team meeting notes content (tracked edits in Microsoft Word files).

• Presentation materials for FLIP Team and reach team meetings – Microsoft PowerPoint file slides and hard copy maps and handouts.

Task 5 – Geodatabase Development for Agricultural and Other Land Uses within the Lower Nooksack River Floodplain

No further work under Tasks 5.1 or 5.2 for Amendment No. 2.

Task 6 – HEC-FIA Modeling Support

No further work under Tasks 6.1 or 6.2 for Amendment No. 2. A new Task 6.3 is as follows.

Task 6.3 - Prepare Building Finished Floor Elevation and Assessed Value Information

Whatcom County is partnering with the US Army Corps of Engineers (Corps) in using HEC-FIA software to perform cost-benefit analyses for the CFHMP update. This model requires input data characterizing buildings at risk in the Nooksack River floodplain. Herrera will assist the County in estimating the finished floor elevation of homes and other valuable buildings in the planning area using a combination of available aerial imagery, County assessor data, on-the-ground photos and other imagery, lidar, and other sources. Specific elevations will be assigned for thousands of buildings as attributes in a GIS database, along with assessed value data obtained from the Whatcom County Assessor web site.

Task 6.3 Assumptions:

- Approximately 4,300 residential and farm structures will be evaluated in this task.
- Before Herrera commences doing this work in detail for all of the targeted parcels in the floodplain study area, Herrera staff will meet with County staff to discuss specific analysis steps and "test run" them on several example parcels to confirm the analytical steps in the process to be applied to all parcels of interest.
- Herrera reviewers will perform QC spot checks as this task work is being completed to check for consistency in how the analysis methods are being applied and accuracy in the results, as best as can be achieved with the available source data.

Task 6.3 Deliverables:

• Geodatabase of parcels with finished floor elevations and assessed values assigned to each structure.

Task 7 – Public Meeting Support

No further work under Task 7 for Amendment No. 2.

Task 8 - Technical Assistance

Throughout the term of this agreement, the County may call upon the Contractor (Herrera and its subconsultants) to perform specific professional services to support the FLIP process as needed. Herrera will promptly communicate all project requirements considered to be outside the approved scope of work for Tasks 1-7 to the County's Project Manager as the work of those tasks is carried out. Herrera must prepare a written scope of work and budget estimate, each being separately subject to the terms and conditions of this Agreement, and receive written approval from the County Project Manager prior to performing any additional work using

Technical Assistance funds. Each scope of work and budget prepared under Task 8 will be mutually agreed upon by the project managers at the County and Herrera, subject to the terms and conditions within this Agreement and will be documented either via e-mail or other written correspondence.

Task 8 Deliverables:

• Scope(s) of work and budget tabulation(s) for specific work to be performed under Task 8, in similar format as the scope and budget of the original consultant contract and amendments thereto.

Task 9 - Integrated Floodplain Management Plan Documentation

Herrera and Wheeler Consulting Group will lead writing of the management plan report and associated appendix material per a document outline agreed upon in coordination with Whatcom County and the FLIP Steering Committee. It is anticipated that a portion of the overall plan will be written in draft form by September 2021 (the time frame covered by contract amendment 2), but that much of the plan writing will still remain to be done as of then.

Task 9 Deliverables:

• Draft chapter contents for the integrated floodplain management plan report – Microsoft Word and Adobe PDF electronic files

Exhibit B-2 Compensation

As consideration for the services provided pursuant to Exhibit A-2, Scope of Work, the County agrees to compensate the Contractor according to the hourly rates provided in the Rate Schedule provided below. Other reasonable expenses incurred in the course of performing the duties herein shall be reimbursed. Mileage is to be reimbursed at the IRS rate; lodging and per diem will be reimbursed at a rate not to exceed the GSA rate for the location at which services are provided. Reimbursement for air travel will be at coach rates. Other expenditures such as printing, postage and telephone charges shall be reimbursed at actual cost.

The Contractor will invoice monthly. Invoices will include hours worked by employee by day together with tasks accomplished. Requests for reimbursement of expenses must be accompanied by copies of paid invoices itemizing costs incurred. Costs of alcoholic beverages are not eligible for reimbursement. Compensation shall not exceed the amended contract amount of \$404,200. Any work continuing after the completion date of the amended contract, unless otherwise agreed upon in writing, will be at the Contractor's expense.

Herrera Environmental Consultants, Inc.

2019 Billing Rates Schedule

Personnel	Position	Rate/Hour
Spillane, Michael	President	\$279.00
Ewbank, Mark	Vice President	\$256.69
Lenth, John	Vice President	\$256.69
Slaughterbeck, Carol	Executive Vice President	\$256.65
Coughlan, Philip	Vice President	\$246.59
Wood, Theresa	Vice President	\$241.28
Zisette, Rob	Scientist VI	\$247.87
Michaud, Joy	Scientist VI	\$239.65
Lancaster, Alice	Engineer V	\$249.39
Aheam, Dylan	Scientist V	\$240.82
Webb, Chris	Engineer V	\$239.47
Wright, Tyson	Engineer V	\$221.38
Parsons, Jeff	Engineer V	\$217.30
Mostrenko, lan	Engineer V	\$216.27
Larkin, Mary	Engineer V	\$215.85
Hinman, Curtis	Scientist V	\$197.96
Houck, Kevin	Engineer V	\$197.54
Dugopolski, Rebecca	Engineer V	\$197.11
Fontaine, Matt	Engineer V	\$191.37
Avolio, Christina	Engineer V	\$189.14
Amtmann, Lindsey	Planner V	\$185.42
Campbell, Arthur	Planner V	\$176.00
Schmidt, Jennifer	GIS Analyst V	\$173.70
Ballek, Len	Scientist V	\$154.25
Busiek, Brian	Engineer IV	\$208.91
Ritchotte, George	Scientist IV	\$192.68
Scott, Brian	Engineer IV	\$189.85
Feller, Meghan	Engineer IV	\$187.27
Merten, Christina	Scientist IV	\$187.23
Mirabile, Tina	Scientist IV	\$180.64
Carpenter, Bruce	Scientist IV	\$177.10
Curran, Joanna	Engineer IV	\$177.10
Iftner, George	Scientist IV	\$174.97
Houck, Heidi	Engineer IV	\$172.89
Presley, Greta	Scientist IV	\$171.79
Mitchell, Colleen	Engineer IV	\$167.68
Dale, Blane	Engineer IV	\$155.35
Forester, Kate	Landscape Architect IV	\$148.16
Wall, Sue	Scientist IV	\$132.93
Waggoner, Jonathan	Engineer III	\$159.46
Sklenar, Ondrej	Engineer III	\$152.59

Personnel	Position	Rate/Hour
Lee, Adam	Engineer III	\$150.89
Yang, Trae	Engineer III	\$149.83
Catarra, Gina	Scientist III	\$148.48
Johnson, Kyle	Engineer III	\$143.27
Turnidge, Laura	CAD Technician III	\$142.14
Prescott, Todd	CAD Technician III	\$139.66
Svendsen, Alex	Scientist III	\$136.90
Hulme, Rich	CAD Technician III	\$133.29
Klara, Matt	Engineer III	\$132.83
Blaud, Brianna	Scientist III	\$131.59
Marshall, Eric	CAD Technician III	\$130.88
Vayanos, Stacy	Landscape Architect III	\$119.19
Schaner, Neil	Engineer II	\$139.77
Spear, Eliza	Scientist II	\$134.60
Wingrove, Katie	Engineer II	\$125.46
Wu, Valerie	Engineer II	\$124.86
Kayser, Gretchen	Engineer II	\$124.71
Brown, Jess	Engineer II	\$120.25
LeClerc, Josh	Scientist II	\$118.66
Geigel, Joseph	GIS Analyst II	\$106.26
Bliss, Kyle	Scientist II	\$102.86
Gleason, Rayna	Landscape Designer II	\$102.19
Maas, Nina	Scientist II	\$99.18
Mullen, Meghan	Engineer I	\$115.68
Bronson, Ryan	Scientist I	\$95.14
Plumb, Riley	Scientist I	\$88.55
Matsumoto-Hervol, Makie	GIS Analyst I	\$88.55
Rapoza, Danielle	Scientist I	\$85.01
Steiner, Camryn	Engineering Intern	\$53.13
Swanson, Jennifer	Accounting Administrator V	\$183.30
Saavedra, Robin	Accounting Administrator III	\$108.31
Rudnick, Tracy	Accounting Administrator III	\$112.71
Maloof, Charlie	Accounting Administrator II	\$103.89
Wang, Jennifer	Accounting Administrator I	\$94.50
Akbas, Emir	Accounting Administrator I	\$85.01
Buttin, Melissa	Marketing Specialist V	\$170.30
Patterson, Jill	Marketing Specialist V	\$156.66
Peterson, Brenda	HR Generalist IV	\$120.00
Jackowich, Pam	Administrative Coordinator IV	\$120.00 \$117.03
Wadkins, Shannon	Administrative Coordinator III	\$109.70
Coleman, Marne	Administrative Coordinator III	\$84.48
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