

**WHATCOM COUNTY CONTRACT
INFORMATION SHEET**

Whatcom County Contract No.
202502011

Originating Department:	Public Works
Division/Program: <i>(i.e. Dept. Division and Program)</i>	River & Flood (9075)/Flood Control Maint (907545)
Contract or Grant Administrator:	Julie Anderson, River & Flood Manager
Contractor's / Agency Name:	Nooksack Indian Tribe

Is this a New Contract? If not, is this an Amendment or Renewal to an Existing Contract? Yes No
 Yes No If Amendment or Renewal, (per WCC 3.08.100 (a)) Original Contract #: _____

Does contract require Council Approval? Yes No If No, include WCC: _____
 Already approved? Council Approved Date: _____ (Exclusions see: Whatcom County Codes 3.06.010, 3.08.090 and 3.08.100)

Is this a grant agreement? Yes No If yes, grantor agency contract number(s): _____ CFDA#: _____

Is this contract grant funded? Yes No If yes, Whatcom County grant contract number(s): _____

Is this contract the result of a RFP or Bid process? Contract _____
 Yes No If yes, RFP and Bid number(s): _____ Cost Center: 19082358

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. Goods and services provided due to an emergency
- Contract work is for less than \$100,000. Contract for Commercial off the shelf items (COTS).
- Contract work is for less than 120 days. Work related subcontract less than \$25,000.
- Interlocal Agreement (between Governments). Public Works - Local Agency/Federally Funded FHWA.

Contract Amount:(sum of original contract amount and any prior amendments):
 \$ 0
 This Amendment Amount:
 \$ 0
 Total Amended Amount:
 \$ 0

Council approval required for; all property leases, contracts or bid awards **exceeding \$40,000**, and professional service contract amendments that have an increase greater than \$10,000 or 10% of contract amount, whichever is greater, **except when**:

- Exercising an option contained in a contract previously approved by the council.
- Contract is for design, construction, r-o-w acquisition, prof. services, or other capital costs approved by council in a capital budget appropriation ordinance.
- Bid or award is for supplies.
- Equipment is included in Exhibit "B" of the Budget Ordinance.
- Contract is for manufacturer's technical support and hardware maintenance of electronic systems and/or technical support and software maintenance from the developer of proprietary software currently used by Whatcom County.

Summary of Scope:

A no-cost interlocal agreement (ILA) with the Nooksack Indian Tribe (NIT) to establish the responsibilities of each party. The NIT will provide Plans, Specifications, Engineer's Estimate, a Basis of Design Report, and a No-Rise memo for the Acme Woody Revetment Repair project, as well as support for permitting, and construction. The Flood Control Zone District will permit and construct the project utilizing FEMA public disaster assistance funding.

Term of Contract: N/A Expiration Date: Project Completion

- Contract Routing:
- | | | | |
|------------------------------------|------------------------------------|-------|-------------------|
| 1. Prepared by: | <u>Christina Schoenfelder</u> | Date: | <u>1-10-25</u> |
| 2. Attorney signoff: | <u>Christopher Quinn</u> | Date: | <u>1/13/2025</u> |
| 3. AS Finance reviewed: | <u>bbennett</u> | Date: | <u>01/28/2025</u> |
| 4. IT reviewed (if IT related): | <u>Initial</u> | Date: | _____ |
| 5. Contractor signed: | <u>[Signature]</u> | Date: | <u>3/11/2025</u> |
| 6. Executive contract review: | <u>DocuSigned by: Satpal Sidhu</u> | Date: | <u>2/25/25</u> |
| 7. Council approved, if necessary: | <u>AB2025-169</u> | Date: | <u>3/11/2025</u> |
| 8. Executive signed: | <u>1192C7C18B664E3...</u> | Date: | _____ |
| 9. Original to Council: | _____ | Date: | _____ |

**WHATCOM COUNTY
PUBLIC WORKS DEPARTMENT**

**ELIZABETH KOSA
DIRECTOR**



RIVER AND FLOOD
322 N. Commercial Street, 2nd Floor
Bellingham, WA 98225-4042
Phone: (360) 778-6230
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www.whatcomcounty.us

MEMORANDUM

TO: The Honorable Satpal Singh Sidhu, Whatcom County Executive, and The Honorable Members of the Whatcom County Council, collectively serving in their capacity as the Whatcom County Flood Control Zone District Board of Supervisors

THROUGH: Elizabeth Kosa, Public Works Director *EK*

FROM: Julie Anderson, River & Flood Manager *JMA*
Gary Stoyka, Natural Resources Manager *GS*

RE: Nooksack Indian Tribe - Interlocal Agreement
Design and Construction Support for the Acme Woody Revetment Repair (Project No. 723008)

DATE: February 13, 2025

Enclosed is an Interlocal Agreement (ILA) between the Nooksack Indian Tribe (NIT) and the Whatcom County Flood Control Zone District (FCZD) for your review and signature.

Requested Action

Public Works respectfully requests that the County Council, acting for the FCZD Board of Supervisors, enter into the above referenced agreement with the NIT to provide the FCZD with consultant design and construction support services for the Acme Woody Revetment Repair Project No. 723008.

Background and Purpose

In 2010 the FCZD constructed an integrated fish habitat and flood control woody revetment project (Acme Project) on the South Fork Nooksack River near Acme, WA. In 2021 the project was damaged by the November floods and the repair is eligible for Federal Emergency Management Agency (FEMA) Disaster Assistance funding.

The Nooksack Indian Tribe is working on the design and construction of a multi-phase integrated fish-flood project in the Fish Camp reach (Fish Camp project) of the South Fork Nooksack River (SFNR) in the vicinity of Acme. The Fish Camp project encompasses the same reach of the SFNR as the Acme Woody Revetment Repair project (Acme Repair Project). The FCZD requires engineering consultant services to prepare Plans, Specifications, Engineer's Estimate, a Basis of Design Report, and a No-Rise memo for the Acme Repair Project, as well as support for permitting, and construction.

The Fish Camp Project is a collaboration and partnership between the NIT and FCZD and shares similar goals and objectives of the Acme Repair Project. The NIT has allocated grant funding to provide the required consulting services for the Acme Repair Project in cooperation and congruence with the Fish Camp project objectives and goals. This agreement mutually benefits the NIT and the FCZD due to increased efficiencies in design coordination for both the Fish Camp project and the Acme Repair Project, eliminating the potential for duplicating efforts towards

hydraulic modeling and reach analysis, and ensuring the FCZD and NIT projects perform together as expected. The FCZD will use the FEMA Disaster Assistance funding to permit and construct the Acme Repair Project.

Funding and Source

This is a no-cost ILA to establish the responsibilities of each party. The NIT will provide Plans, Specifications, Engineer's Estimate, a Basis of Design Report, and a No-Rise memo for the Acme Woody Revetment Repair project, as well as support for permitting, and construction. The FCZD will permit and construct the project.

Please contact Christina Schoenfelder at extension 6274, if you have any questions or concerns regarding the terms of this contract.

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Funding and Source

This is a no-cost ILA to establish the responsibilities of each party. The NIT will provide Plans, Specifications, Engineer's Estimate, a Basis of Design Report, and a No-Rise memo for the Acme Woody Revetment Repair project, as well as support for permitting, and construction. The FCZD will permit and construct the project.

Please contact Christina Schoenfelder at extension 6274, if you have any questions or concerns regarding the terms of this contract.

**INTERLOCAL AGREEMENT
BETWEEN
THE NOOKSACK INDIAN TRIBE
AND
THE WHATCOM COUNTY FLOOD CONTROL ZONE DISTRICT
FOR
DESIGN AND CONSTRUCTION SUPPORT OF THE ACME WOODY REVETMENT
REPAIR PROJECT (NO. 723008)**

This Agreement is made and entered into by and between the Nooksack Indian Tribe, a federally recognized Indian tribe (hereinafter referred to as the “Tribe”) and the Whatcom County Flood Control Zone District, a State of Washington quasi-municipal corporation (hereinafter referred to as the “District”).

WHEREAS, the members of the Tribe have lived in and around the area that is now Whatcom County, Washington, since time immemorial; and

WHEREAS, the Nooksack Tribal Council is the duly constituted governing body of the Tribe, by the authority of the Constitution and by-laws of the Tribe; and

WHEREAS, the Tribe works to protect restore, enhance, and manage natural resources within the exterior boundaries of the Tribe’s Reservation and throughout the Tribe’s Usual and Accustomed (U&A) fishing and gathering grounds and stations and traditional territories; and

WHEREAS, in 2010 the District constructed an integrated fish habitat and flood control woody revetment project (herein after referred to as the Acme Project) on the South Fork Nooksack River near Acme, WA; and

WHEREAS, in 2021 the Acme Project was damaged by the November floods; and

WHEREAS, repair of the Acme Project is eligible for Federal Emergency Management Agency (FEMA) Disaster Assistance funding; and

WHEREAS, the District requires engineering consultant services to prepare Plans, Specifications, Engineer’s Estimate, a Basis of Design Report, and a No-Rise memo for the Acme Woody Revetment Repair project (herein after referred to as the Acme Repair Project), as well as support for permitting, and construction; and

WHEREAS, the South Fork Fish Camp Integrated Flood-Fish Project (herein after referred to as the Fish Camp Project) is a collaboration and partnership between the Tribe and District; and

WHEREAS, the Fish Camp Project encompasses the same reach of the South Fork Nooksack River, and shares similar goals and objectives of the Acme Repair Project; and

WHEREAS, the Tribe has allocated grant funding to provide the required consulting services for the Acme Repair Project in cooperation and congruence with the Fish Camp Project objectives and goals; and

WHEREAS, this agreement mutually benefits the Tribe and the District due to increased efficiencies in design coordination for both the Fish Camp Project and the Acme Repair Project, eliminating the potential for duplicating efforts towards hydraulic modeling and reach analysis, and ensuring the District and Tribal projects perform together as expected.

NOW, THEREFORE, it is agreed by the parties hereto as follows:

1. PURPOSE

The purpose of this Agreement is to set the terms whereby the Tribe will provide the District with engineering consultant design and construction support for the Acme Repair Project and the District will provide private landowner and community outreach, design review, permitting, and construction of the Acme Repair Project. The Tribe, through their engineering consultant, will provide (1) construction-ready, stamped Plans, Specifications and Engineers Estimates, (2) permitting and construction support, and (3) stamped as-built Plans for the Acme Repair Project. The District will be responsible for (1) coordinating with the Tribe's engineering consultant's project manager on all aspects of design, (2) coordinating with private landowners and obtaining landowner agreements for access and construction, (3) reviewing the design and provide input, (4) permitting and construction, and (5) post-construction monitoring and maintenance as needed/required for the Acme Repair Project.

2. PARTY RESPONSIBILITIES

A. NOOKSACK INDIAN TRIBE RESPONSIBILITIES

The Tribe, through their engineering consultant, shall:

1. Provide to the District, Plans, Specifications and Cost Estimates that meet the District's design objectives and budget as described in Exhibit A.
2. Provide to the District, a Basis of Design Report and a No-Rise Memo as described in Exhibit A.
3. Provide to the District, consultant support for permitting, bid advertisement and construction as described in Exhibit A.
4. Provide to the District stamped as-built plans as described in Exhibit A.
5. Hold bi-weekly meetings with the consultant and the District.
6. Provide opportunity for the District to review the design at project milestones as described in Exhibit A.
7. Attend (both Tribal and Consultant staff) meetings with FEMA as necessary to assist the District in permitting, funding, and cost-sharing for the Acme Repair Project.
8. Provide copies of consultant invoices and progress reports that itemize Acme Repair costs to the District upon request.
9. Provide to the District the following documents

Acme Woody Revetment Repair Project Deliverables:

No.	Description	Due Date
A.1	30% Design Plans.	6/28/24 (complete)
A.2	60% Design Plans, Specifications, Engineer’s Cost Estimate, No-Rise Memo.	8/30/2024 (complete)
A.3	90% Design Plans, Specifications, Engineer’s Cost Estimate, and Draft Basis of Design Report (BOD).	1/20/2025
A.4	100% Stamped Design Plans, Specifications, Engineer’s Cost Estimate, and Final Basis of Design Report (BOD).	3/1/2025
A.5	Stamped As-Built Drawings.	1 mo. post const.
A.6	Tracked Consultant Costs and Invoices	Upon request

B. FLOOD CONTROL ZONE DISTRICT RESPONSIBILITIES

The District shall:

1. Coordinate with the Tribe and their engineering consultant’s project manager on all aspects of design.
2. Coordinate with the consultant to host bi-weekly meetings with the consultant, District, and Tribe to provide project updates.
3. Provide private landowner coordination support and obtain all necessary landowner agreements and easements required for Acme Repair Project access, construction, and post-construction monitoring and maintenance.
4. Coordinate with the Tribe on landowner outreach whenever there is overlap with the Fish Camp Project.
5. Provide to the Tribe an archeology and cultural resources review of the Acme Repair Project area.
6. Provide to the Tribe topographic and partial bathymetric survey of the Acme Repair Project area.
7. Prepare and Submit applications for all applicable Acme Repair Project permits.
8. Be responsible for the bid advertisement, contractor selection, construction, permit compliance, planting, mitigation, and maintenance of the Acme Repair Project.
9. Coordinate with the Tribe and their engineering consultant’s project manager during construction on any change orders and/or issues that arise that would result in additional construction support needs, thus increasing construction support costs.
10. Provide to the Tribe the following documents:

Acme Woody Revetment Repair Project Deliverables

Number	Description	Due Date
B.1	Topographic/Bathymetric Survey and Base map	3/27/24 (complete)
B.2	Review Comments for the 30%, 60%, 90%, 100% Design Submittals	2 weeks after receipt
B.3	Archeology and Cultural Resource Report	8/30/2024 (complete)

B.4	Copies of Final Permits required for the Acme Repair Project	Prior to construction
B.5	Final Compiled Construction Bid Documents and Bid Tabulations	Spring, 2025

4. TERM OF AGREEMENT

The period of performance for this Agreement shall be consistent with the project schedule, which is currently March 1, 2024 through October 31, 2026.

6. AGREEMENT ALTERATIONS AND AMENDMENTS

This Agreement may be amended by mutual agreement of all of the parties hereto. Such amendments shall not be binding unless they are in writing and signed by personnel authorized to bind each of the parties.

7. DISPUTES

In the event that a dispute arises under this Agreement, a dispute board shall resolve the dispute in the manner set forth in this section. The parties to this Agreement shall each appoint a member to the dispute board. The dispute board shall evaluate the facts, contract terms and applicable statutes and rules and make a determination of the dispute. The determination of the dispute board shall be final and binding on the parties hereto. In the performance of this Agreement, it is mutually understood and agreed upon by the parties hereto that this Agreement shall be governed by the laws and regulations of the State of Washington and the federal government, both as to interpretation and performance.

8. ASSIGNMENT

The obligations to be performed by the parties under this Agreement are not assignable or delegable by any party in whole or in part, without the prior written consent of both of the other parties.

9. WAIVER

A failure by any of the parties to exercise its rights under this Agreement shall not preclude that party from subsequent exercise of such rights and shall not constitute a waiver of any other rights under this Agreement unless stated to be such in a writing signed by an authorized representative of the party and attached to the original Agreement.

10. TERMINATION

This Agreement may be terminated without cause by any Party effective upon sixty (60) days written notice, mailed postage pre-paid by certified mail, return receipt requested, to all remaining Parties last known address for the purposes of giving notice under this section. If this Agreement is so terminated, the Parties shall be liable only for performance rendered or costs incurred in accordance with the terms of this Agreement prior to the effective date of termination.

11. SEVERABILITY

If any provision of this Agreement or any provision of any document incorporated by reference shall be held invalid, such invalidity shall not affect the other provisions of this Agreement which can be given effect without the invalid provision, if such remainder conforms

to the requirements of applicable law and the fundamental purpose of this Agreement, and to this end the provisions of this Agreement are declared to be severable.

12. INTEGRATION OF AGREEMENT

This Agreement contains all the terms and conditions agreed upon by the parties. No other understanding, oral or otherwise, regarding the subject matter of this Agreement shall be deemed to exist or to bind any of the parties hereto.

13. CONTRACT MANAGEMENT

No new separate legal or administrative entity is created to administer the provisions of this Agreement. No agent, employee, servant, or representative of any party shall be deemed to be an employee, agent, servant, or representative or any other party for any purpose. Each party will be solely responsible for its acts and for the acts of its agents, employees, and servants during the term of this Agreement. The Contract Administrator for each of the parties shall be responsible for and shall be the contact person for all communications regarding the performance of this Agreement.

The Contract Administrator for the Tribe is:

Lindsie Fratus-Thomas, Watershed Restoration Coordinator (Project Manager)
Nooksack Indian Tribe Natural Resources Department
5016 Deming Road
Deming, WA 98244
(360) 592-5140, ext. 3135
lfratus@nooksack-nsn.gov

The Contract Administrator for the District is:

Christina Schoenfelder, River and Flood Engineering Supervisor
Whatcom County Public Works Department
322 N. Commercial Street, 2nd Floor
Bellingham, WA 98225
(360) 778-6274
Cchoenf@co.whatcom.wa.us

14. COUNTERPARTS

This Agreement may be executed in multiple counterparts and each shall be deemed an original, but all of which together constitute a single instrument.

15. EFFECTIVE DATE

This Agreement shall be in full force and effect upon full execution by the Parties and filing with the Whatcom County Auditor or posting on each Party's website, whichever method of filing is chosen.

IN WITNESS WHEREOF, the parties have executed this Agreement.

NOOKSACK INDIAN TRIBE

By: Heidi Davis

Title: Nooksack Indian Tribe, General Manager

Signature:  Signed by:
Heidi Davis
396377FD270A448...

Date: 3/4/2025

WHATCOM COUNTY FLOOD CONTROL ZONE DISTRICT

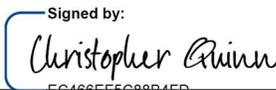
By: Satpal Singh Sidhu

Title: Whatcom County Executive, on behalf of the Whatcom County Flood Control Zone District Board of Supervisors

Signature:  DocuSigned by:
Satpal Sidhu
4492C7C18B664E3...

Date: 3/11/2025

Approved as to form:

 Signed by:
Christopher Quinn
EG466EF5688B4FD... 3/11/2025
Date
Christopher Quinn, Whatcom County
Chief Civil Deputy Prosecuting Attorney

**EXHIBIT A:
SCOPE OF WORK
FOR THE
ACME WOODY REVETMENT REPAIR PROJECT**

The Nooksack Indian Tribe (Tribe), Whatcom County Flood Control Zone District (County) and Herrera Environmental Consultants (Consultant) have prepared this Scope of Work (SOW) to define the design and engineering consultant services needed for the Acme Woody Revetment Repair project (Acme Repair Project), to facilitate an amendment to the existing contract between the Tribe and Herrera for the South Fork (SF) Nooksack River Fish Camp Integrated Fish-Flood Project- Final Design (Fish Camp Project), and to outline the work and deliverables the Consultant will complete as part of the Interlocal Agreement between the County and the Tribe. The Fish Camp project is located on the SF Nooksack River between river mile (RM) 7.3-9.7 and is a collaboration between the Tribe and the County to integrate salmon recovery and flood risk management by designing a project that restores in-stream and floodplain habitat and reduces flood risk to the town of Acme. Located within the Fish Camp project area from RM 8.8-9.0, the Acme Repair Project will repair a woody revetment that was constructed by the County in 2009-2010, known as the Acme Early Chinook Restoration Project (Acme Project). The County is seeking FEMA emergency funding for damages that occurred to the Acme Project due to the 2021 floods. While construction of the Acme Repair Project will be implemented by the County, design and the engineer's construction oversight will be completed in coordination with the broader Fish Camp Project under the Tribe's existing Fish Camp Final Design contract with Herrera. Design and implementation of the Fish Camp Project is partially funded by Floodplains by Design grant funds conveyed through Interlocal Agreements between the Tribe and County.

This SOW defines the design and engineering consultant services required for the Interlocal Agreement (ILA) between the County and the Tribe for the Acme Repair Project. A similar SOW will be amended to the Tribe's Fish Camp Project design contract with Herrera and budget as Task 15. Generally, work items include preparation of Plans, Specifications, Engineer's Estimate, Basis of Design Report and FEMA Floodplain Compliance Memorandum. Work will also include providing support for permitting, bid advertisement, and construction, as well as preparation of as-built plans. The Consultant shall provide all labor and services necessary to complete the work outlined in this SOW, including all supplies, equipment, software, incidentals, and materials. The Consultant shall submit all work to the Tribe and County in the format as it is detailed in the Task elements.

The Acme Repair Project design objectives include restoring the pre-damage function of the Acme Project which included preventing additional bank retreat, providing controlled floodplain connectivity, and reestablishing habitat diversity through hydraulic and geomorphic complexity. Key constraints to be considered in the final design include construction cost, constructability, and access to the site. The final design should optimize efficiencies and benefits to be realized for both fish habitat restoration and flood hazard management. The budget for this project should remain below FEMA's small project threshold of \$1 million. This budget number includes construction costs, permits County staff time, and outside consultant contracts, and other associated fees.

The final design will likely include the following:

- Large woody debris (LWD) structures along approximately 220 feet of the left bank of the Nooksack and side channel.

- LWD structures at the mouth of the side channel to meter flows and discourage South Fork avulsion potential
- LWD structure ballast consisting of chained large rock and timber piles

The following schedule milestones shall be met for this Project in order for construction to occur during the 2025 fish window:

Description	Proposed Due Date
Site Evaluation and Data Review	4/19/2024
Alternatives Analysis	6/1/2024
30% Design Plans.	6/28/24
60% Design Plans, Specifications, Engineer’s Cost Estimate, Floodplain Compliance Memorandum.	8/30/2024
90% Design Plans, Specifications, Engineer’s Cost Estimate, and Working Draft Basis of Design Report (BOD).	2/4/2025
100% Stamped Design Plans, Specifications, Engineer’s Cost Estimate, and Final Basis of Design Report (BOD).	3/1/2025
Stamped As-Built Drawings.	1 month post-construction
Itemized Consultant Costs and Invoices	Upon Request

Task 1: Project Management and Administration

The Consultant’s project manager will be responsible for ongoing administration of the project, including maintaining a project schedule, tracking project costs, creating a secured web-based electronic data transfer site (SharePoint), as well as coordination of work efforts with the Fish Camp Project Team (Tribe County, and subconsultants). The Consultant will coordinate project design with the Tribe and County as described in the subsequent tasks. General coordination is assumed to include biweekly check-in meetings with the Tribe and County and otherwise on an as-needed basis based on project developments.

Deliverables:

- Biweekly 1-hour-long project check-in meetings
- The Consultant will provide meeting notes including action item lists
- Monthly invoices with accompanying progress reports

Task 2: Site Evaluation and Existing Data Review

The Design Team, comprised of Tribe, County and Herrera staff, will complete a site evaluation to characterize existing conditions, design constraints, design approaches, and to conduct reconnaissance-level data collection to inform subsequent task work. The site assessment will commence with a project team meeting on site to evaluate existing conditions, the design approach and repair locations.

The site assessment shall evaluate:

- Habitat enhancement objectives and opportunities
- Flood risk reduction potential
- Regulatory compliance issues
- Site access, staging and constructability

- Side channel hydraulics and geomorphology including impacts of side channel culvert removal
- Existing bank conditions
- Existing bank, in-channel, and side channel wood structures
- Riparian vegetation
- Geomorphic conditions

The existing data review will include a thorough examination of existing site information including but not limited to:

- the 2009 and 2010 design plans (pdf and cad files), design report and as-built construction documents (NHC, 2010)
 - Included within the design report is the completed hydraulic and Floodplain Compliance analysis
- Geomorphology report (NHC, 2009) and memo (NHC, 2010)
- Avulsion Risk Analysis Memo (Herrera, 2005)
- Available geotechnical information

Assumptions

- Geotechnical explorations will be required as needed based on the project design parameters. The Consultant will utilize best available information to inform the pile design as much as possible and will supplement with additional geotechnical explorations as needed.
- Geomorphic assessment is limited to review of existing and available studies and reports and the documentation of onsite conditions during the field visit. No geomorphic analysis is included in this task.
- The County will provide a survey and basemap of the project area using Washington State Plane North horizontal datum and NAVD88 vertical datum no later than March 30, 2024.
- The County will complete and provide a cultural and archaeological site assessment of the project area.
- The County will obtain any easements necessary for site access.

Deliverables

- The site evaluation and existing data review will synthesize desktop spatial analysis information and field assessment findings. Information and observations from the site visit and existing data review will be characterized within the Basis of Design Report described in Task 5.

Task 3: Alternatives Assessment

The alternatives analysis will qualitatively evaluate three options. Evaluation criteria may include costs, flood risk reduction impacts, habitat implications, permit requirements, resilience or projected design lifetime, benefits to local landowners, downstream impacts, compatibility with future projects including the Fish Camp Project, constructability and FEMA compliance. The Consultant will work with the Design Team to determine final evaluation criteria. Hydraulic implications of each alternative will be qualitatively assessed and guided by the geomorphic understanding of the project area and existing conditions. The Consultant will host a virtual workshop with the Design Team to review results of the draft alternatives assessment and recommendations to obtain their feedback and to forge a consensus on the preferred alternative.

The three alternatives are as follows:

1. No action
2. Repair of the project to 2010 pre-damage condition and location
3. Set back and repair of the project along the current eroded bankline

The alternatives analysis will result in identification of a preferred alternative.

Assumptions

- No alternatives beyond the three listed above will be evaluated.

Deliverables

- The alternatives analysis, including rationale behind the preferred alternative will be included in the Basis of Design Report described in Task 5.

Task 4: Design Development

This task covers work required to advance the preferred alternative from the conceptual preferred alternative identified in Task 3 to the final bid-ready design including plans, construction cost estimates, and construction specifications. The design will incorporate design elements from the 2009 and 2010 project as applicable. The design should address the following:

- Hydraulic and hydrologic issues
- Environmental/permitting considerations
- Geotechnical conditions
- Landowner concerns
- FEMA Requirements:
 - The project shall be designed such that the new structures along the mainstem SF Nooksack River (SFNR) bank are wholly within areas, both horizontally and vertically, that were previously land prior to November 2021
 - The Design shall be consistent with the FEMA Programmatic Biological Opinion with National Marine Fisheries

Assumptions

- The Consultant shall use County provided title blocks and associated pen styles will be used for the construction drawings. The Consultant may use their own pen styles inside the drawings but not within the title block.

Task 4.1: 30% Design Development

This task covers the work required to advance the conceptual preferred alternative identified in Task 3 to the 30% level of design completion.

The Consultant shall prepare 30% design plans to submit to the Tribe and County for review and comment. One round of comments on the final 30% plans is anticipated. The plans will include, at a minimum, the following:

1. Cover Sheet with Vicinity map
2. Standard legend and symbols
3. Existing conditions
4. Proposed plan(s) showing location of proposed ELJ structures

5. Typical ELJ structure sections
6. Quantities sufficient to initiate Endangered Species Act (ESA) Consultations

Deliverables

- Final (no draft) 30% design plans in PDF and CAD (.dwg) format
- Final (no draft) Preliminary Engineer's Estimate of Construction Costs (EEOCC) (.xls)
- GIS shapefiles for all design elements for the 30% design level

Task 4.2: 60% Design Development

This task covers the work required to advance the 30% design identified in Task 4.1 to the 60% level of design completion. This task includes creation of an EEOCC in the Bid Response Form format to be provided by the County, and preparation of draft special provisions supplementing standard specifications for materials and their placement for non-standard items. Emphasis shall be placed on design content the County needs in the completed 60% plan set for permit applications.

4.2.1 Design Plans:

The Consultant shall prepare 60% design plans to submit to the Tribe and County for review and comment. The Consultant will address the 30% review comments and update the 60% plans. One round of comments on the final 60% plans is anticipated. The sheets from Task 4.1 will be embellished for the 60% level of completion and the following additional sheets will be prepared:

7. TESC and Stream Isolation Plan and details
8. ELJ structure details

At the request of the County, the Consultant will provide additional quantities to support permitting.

4.2.2 Construction Cost Estimate:

The Consultant shall determine construction quantities and prepare an EEOCC to be submitted to the Tribe and County for review with the plan submittal. The Engineer's Estimate shall be in County Bid Response Form format (template to be provided by the County).

4.2.3 Special Provisions:

The WSDOT/APWA Standard Specifications for Road, Bridge, and Municipal Construction will serve as the basis for the project's construction specifications (current version). The Consultant will provide draft special provisions text, for items not adequately covered in Divisions 2 through 9 of the WSDOT Standard Specifications, with measurement and payment identified for all Bid Items. The County shall be responsible for all general administration and Division 0 and Division 1 specifications. FEMA funding prohibits the use of bid items that utilize WSDOT's Force Account (FA) method for payment and also discourages the use of lump sum items. No FA items will be included in the bid package and use of lump sum items will be minimized.

Assumptions:

- The County will provide the site Planting Plan and all work to install and maintain plants. No planting, beyond seeding for site stabilization, will be performed under the construction contract.
- The County will provide Bid Response Form template in .xls format.
- It is anticipated that the total area of soil disturbance allowed for construction will be less than 1 acre and no Construction Stormwater General Permit will be required.

- Estimation of construction quantities necessary for the 60% Engineers Estimate are included under this task. Estimation of additional quantities and area calculations to support the County's permit applications are covered separately under Task 7.

Deliverables:

- Itemized responses to 30% Review Comments
- Final (no draft) 60% design plans in PDF and CAD (.dwg) format
- Final (no draft) 60% EEOCC in excel (.xls) format
- Final (no draft) 60% Specifications in word (.docx) format
- GIS shapefiles for all design elements for the 60% design level

Task 4.3: 90% Design Development

This task covers the work required to advance the 60% design identified in Task 4.2 to the 90% level of design completion. This task includes refinement of the design plans, EEOCC, and special provisions.

4.3.1 Design Plans:

The Consultant shall prepare 90% design plans to submit to the Tribe and County for Review and comment. The Consultant will address the County's 60% review comments and update the 90% plans. One round of comments on the final 90% plans is anticipated. The sheets from Task 4.2 will be embellished and supplemented as needed for the 90% level of completion.

4.3.2 Construction Cost Estimate:

The Consultant shall refine the 60% EEOCC to the 90% level to be submitted to the Tribe and County for review with the plan submittal.

4.3.3 Special Provisions:

The Consultant will prepare 90% specifications for Tribe and County Review.

Deliverables:

- Itemized responses to 60% Review Comments
- Final (no draft) 90% design plans in PDF and CAD (.dwg) format
- Final (no draft) 90% EEOCC in excel (.xls) format
- Final (no draft) 90% Specifications in word (.docx) format
- Anticipated Bid Advertisement and Construction Schedule showing number of allowed working days. Three months will be anticipated for bid advertisement/award/contract execution.
- GIS shapefiles for all design elements for the 90% design level

Task 4.4: 100% Design Development

This task covers the work required to advance the 90% design identified in Task 4.3 to the 100% level of design completion. This task includes refinement of the 90% design plans, 90% EEOCC in bid tab format and the 90% special provisions supplementing standard specifications for materials and their placement for non-standard items.

4.4.1 Design Plans:

The Consultant shall prepare draft and final 100% design plans to submit to the Tribe and County for Review and comment. The Consultant will address any final comments on the draft 100% plans and update the final 100% plans. The sheets from Task 4.3 will be embellished for the 100% level of completion. Plan

drawings shall provide all necessary information for Contractor to build the project to specified lines and grades, however the Consultant shall also prepare AutoCAD files for Contractor use that clearly identify relevant surfaces and points for construction surveying/staking and machine grading.

4.4.2 Construction Cost Estimate:

The Consultant shall refine the 90% EEOCC to the 100% level to be submitted to the Tribe and County for review with the plan submittal.

4.4.3 Special Provisions:

The Consultant will prepare 100% design specifications for Tribe and County Review.

Deliverables

- Itemized responses to 90% Review Comments
- Draft and final 100% design stamped Plans in PDF and CAD (.dwg) format
- Draft and final EEOCC (Bid Response Form format) in PDF and excel (.xls) format
- Draft and final Specifications in word (.docx) format
- Contractor-Ready CAD files
- GIS shapefiles for all design elements for the 100% design level

Task 5: Basis of Design Report

The Consultant will prepare a Basis of Design Report (BODR) that describes design constraints, design methodology and technical assumptions. The BODR shall also describe and summarize the alternatives analysis and rationale for selection of the preferred alternative. The information, analysis and conclusions completed in Tasks 2, and 3 will be included in the BODR. The Tribe and County will review the working Draft BODR along with the 90% design deliverables and will provide comments to the Consultant. The Consultant will review and incorporate the comments provided and submit a Final BODRR with the 100% deliverables to the Tribe and County. One round of comments on the 90% BODR report is anticipated.

Deliverables

- Working draft and final stamped Basis of Design Report

Task 6: FEMA Floodplain Compliance Memorandum

This task includes the work required to develop a stamped technical memorandum that demonstrates compliance with the applicable Whatcom County FEMA floodplain management regulations. The memorandum will draw upon the 2009 and 2010 hydraulic analysis and modeling and the geomorphic assessments conducted previously under this contract to provide the rationale that the project will not cause any adverse increases (i.e. equal to or greater than 0.005 foot) to the FEMA 100-year base flood water surface elevation. The memorandum will confirm that the project will result in no net loss of floodplain storage. A draft memo will be delivered along with the 60% design development deliverables. The Tribe and County will provide comments on the draft memo, and the Consultant will review and incorporate the comments and submit to the Tribe and County a Final memo that accompanies the final BOD report.

Assumptions

- No hydraulic modeling will be performed for this project-specific FEMA compliance analysis.
- Existing conditions assume a pre-damage bank.

Deliverables

- Draft and final stamped FEMA Floodplain Management Compliance Memorandum

Task 7: Permit Support

The County will lead the permit effort including correspondence and coordination with all permit agencies. The Consultant will support the County's permitting process and provide, at the County's request, up to two report figures and permit-related impact quantity summaries not provided as part of Task 4 to aid the County's environmental permitting effort. Cultural resources consultation will be completed by the County.

The Consultant shall complete the DNR Public Safety Checklist for Large Woody Debris Projects as required by the Department of Natural Resources (DNR) aquatic entry agreement.

Assumptions

- The County will obtain any easements or acquisitions necessary for access and construction.
- The Consultant will design the project to be consistent with FEMA's Programmatic Biological Opinion with National Marine Fisheries (NMFS).
- The Project will not disturb over 1 acre of ground and will not require a Construction Stormwater General Permit.
- The County will provide the DNR Safety Checklist template for the Consultant to complete.

Deliverables

- Draft and final DNR Safety Checklist
- Estimated permit-related impact quantities.
- Up to two 8x11 report figures to support permit applications

Task 8: Bidding and Construction Support

The Consultant will support the County in bidding and constructing the project, including drafting and stamping post-construction as-built drawings.

Task 8.1 Bid Advertisement Support

The Consultant will support the County with responding to Requests for Information (FRIs), addendums or clarifications of the design through the bidding process. The Consultant may prepare up to one addendum package that involves reissuing up to 3 sheets from the final Plan Set as well as revisions to the Specifications and Bid Response Form.

Task 8.2 Construction Support

The Consultant shall provide engineering and other support during construction of the project. Work will include attendance at a preconstruction meeting and up to three onsite construction meetings. The Consultant may be asked to assist with additional construction related tasks including:

- Review county prepared Record of Materials (ROM).
- Review contractor material submittals and Requests for Information (RFIs) including all geotechnical engineering needed to support pile driving submittals, RFIs and field changes
- Assist in up to two change orders or minor change field orders.

- Construction observation site visits.

Time is of the essence during construction and the Consultant shall commit to prompt review and response turnarounds during construction. Key Consultant support staff shall be available at all times during the working day for construction inquiries. Written responses to submittals RFIs, etc. shall be returned within 3 days and will be as quick as same-day to avoid construction delays.

Immediately post-construction the County will provide construction redlines and any necessary drone or on-the-ground survey as required by the Consultant for as-built documentation.

Assumptions

- The County will provide full-time inspection services for the project.
- The County will provide construction red-lines, survey CAD files, and imagery to document as-built conditions.

Deliverables

- Preconstruction meeting notes
- Construction observation visit notes and photos
- Written responses for submittal reviews and RFIs
- Exhibits, calculations, revised Plans, and Specifications as necessary for Change Orders
- Draft and final stamped As-Built Plans in .dwg and .pdf format