



December 30, 2022

Cody Jennings
Municipality of Skagway Port Director
PO Box 415
Skagway, AK 99840

**Re: Port of Skagway: Breakwater Repair Project – Phase 2
KPFF Scope and Fee Amendment No. 01
Project No. 10092200205**

Cody,

We have prepared this scope of work based on conversations with your team about the Municipality of Skagway's (MOS) small boat harbor breakwater. The structure has experienced some failures and need immediate repairs to stabilize the breakwater to stop further damage. The Port needs to understand if the failures are related to corrosion, original construction defects or overall structural design before a comprehensive plan or repair can be implemented.

This Scope of work addresses the need to determine the root cause or causes of the failures.

KPFF Scope of Proposed Services

KPFF proposes to provide the following services as part of this scope and fee proposal:

Task 1: Project Management and Design Coordination

KPFF will provide general project administration, invoicing and coordination with subconsultants and MOS staff.

- Monthly invoices will be provided for this work.
- Coordination with subconsultants includes weekly design meetings and periodic coordination with the upland designer.

Task 2: Wave Barrier Design Check & Testing

The Port is conducting a dive inspection of the wave barrier to find any additional failures or signs of failures not found in the initial ROV inspection. KPFF will provide assistance during the inspections to direct the explorations. The Port's dive inspectors will also cut steel samples or coupons, out of the steel piles. These Coupons will be sent to a lab for testing to determine the composition of the material and look at the material to identify the possible cause of the failure.

KPFF will work with Subconsultant Glostén Associates to determine the 100 year wave size and period that the structure would experience. Glostén will utilize the existing models they have developed for the Ore Dock Projects. Glostén will also be able to determine the loads generated on the wall from these storm events. See the attached scope of work from Glostén for additional details.

KPFF will use the loading from the 100 year storm event and the wave events listed in the record drawings to check the existing structure. KPFF will also evaluate if fatigue in the structure is a controlling factor.

KPFF will develop a high level concept for a comprehensive repair or strengthening of the wave barrier once the design checks. KPFF will issue a summary memo will compile the findings and recommendations of the study. KPFF will meet with the Port on a weekly basis to discuss findings and progress of the design team.

Exclusions

This scope does not include final design or geotechnical exploration.
No site visits by the design team will be required.

Amendment Fees:

The total estimated not-to-exceed maximum fee, including reimbursable expenses, for the services described in this letter is **\$43,400** bringing the total project budget to \$68,300. Fees will be billed on an hourly basis using the hourly rates presented on the attached fee schedule. Reimbursable expenses will be billed at cost with no markup and no additional markup will be applied to subconsultants reimbursable expenses.

We appreciate this opportunity to work with the Port of Skagway. We are available to discuss this proposal at your convenience. Please contact me at (206) 382 0600 should you have any questions or require additional information.

Sincerely,



Ed DeBroeck, PE (WA & CA), DBIA
Associate
CC: Bob Riley, PE, Principal

Attachments: Detailed Fee Proposal, Subconsultant Scope and Fee letter

Port of Skagway: Breakwater Repair Project



Breakwater Repair Project Fee - Phase 2
 Scope Fee Estimate
 2022-12-30

#	2022 Hourly Rate	KPFF										Subconsultants		Total
		Principal	Project Manager	Senior Technical Specialist	Senior Engineer	Prof. Engineer	Construction Project Manager	Design Engineer	Project Coordinator	Senior Cad Tech	CAD	Glosten Associates	ESI Testing	
		\$ 270	\$ 245	\$ 250	\$ 220	\$ 192	\$ 187	\$ 170	\$ 138	\$ 150	\$ 133			
	Task 1: Project Management & Design Coordination		2						12			\$ -	\$ -	\$ 2,146
1.10	Overall Project Management, Invoicing and coordination		2						12					
	Task 2: Wave Barrier Design Check & Testing	4	24			26		36	4		8	\$ 14,950	\$ 5,000	\$ 39,638
2.10	Test Steel Samples from Existing Wall		2										\$ 5,000	
2.20	Coastal Engineering check load for 100 Year storms		4			12		16				\$ 14,950		
2.30	Structural Engineering & Dive Inspection Coordination	2	2			2								
2.40	Repair / Strengthening Concept Design		8			8		20	4		8			
2.50	Summary Memo	2	8			4								
											Subtotal		\$ 41,790	
											KPFF Expenses: Travel, Etc.		\$ -	
											Subconsultant Expenses: Travel, Etc.		\$ -	
											Subconsultant Markup		\$ 1,596	
											Design Total		\$ 43,400	

Assumptions and Notes:

1. Rates for 2023 displayed, rates will be adjusted each calendar year.
2. Reimbursable expenses will be billed at cost with no markup.
3. Evaluation of Overall Breakwater design/ peer review not included at this time
4. Assume no site visits required at this time
5. Dive inspection by MOS



Glosten

12 December 2022
File No. P0156.22

Ed DeBroeck
KPFF Consulting Engineers
1601 Fifth Avenue, Suite 1300
Seattle, Washington 98101

Subject: Skagway Breakwater

References: 1. DeBroeck, E., KPFF, email to J. Morgan, Glosten, "Skagway wave barrier,"
6 December 2022.

Dear Ed:

We appreciate the opportunity to learn about the Skagway breakwater from your email. We are pleased to provide this proposal to support KPFF with this project.

SCOPE OF WORK

We propose two tasks to support design review of the existing barrier. First, we will modify and re-run our existing SWAN model to include the wave barrier. Wave transmission will be approximated using the method of Wiegel. Second, we will extract significant wave heights at the barrier location for the 100-year return storm and calculate the wave loads and pressures on the barrier using methods prescribed in the Army Corps Coastal Engineering Manual. These calculations will assume the waves are fully reflected.

DELIVERABLES

Our project deliverable will be a short report documenting the calculations described above. This report will not include background of the climatology from previous work defining the 100-year event.

COST AND TERMS

We estimate that the engineering effort for performing these tasks will cost USD \$14,950. We will bill you monthly on a time-and-materials basis. We have attached our 2023 fee schedule and standard terms and conditions of service. This proposal is valid for 30 days.

We have assumed that travel is not required. Travel expenses will be billed at cost if travel becomes necessary.

SCHEDULE

We are prepared to start within three weeks of execution of your contract or purchase order, or your signature below indicating your acceptance of the terms provided. We estimate that we can complete the effort within three weeks of project start.

I will be your main point of contact. Thank you for the opportunity to submit our proposal for this project. We look forward to building on our relationship with KPFF.

Sincerely,

Justin M. Morgan, PE
Principal, Ocean Engineering & Analysis

JMM:mjp

Enclosures: 1. 2023 Fee Schedule
2. Standard Terms & Conditions

PROPOSAL TITLE: Skagway Breakwater

Glosten Proposal No. P0156.22

ACCEPTED BY KPFF Consulting Engineers

Signature and Date

Printed Name and Title



Glosten

2023 FEE SCHEDULE

Professional Staff	<i>Grade</i>	<i>Hourly Rate</i>
Principal	E9	\$314
Principal / Senior Marine Consultant	E8	\$308
Senior Engineer / Marine Consultant	E7	\$270
Senior Engineer / Marine Consultant	E6	\$233
Project Engineer / Marine Consultant	E5	\$211
Project Engineer / Marine Consultant	E4	\$195
Engineer	E3	\$179
Engineer	E2	\$168
Staff Engineer	E1	\$157
Engineering Intern	E0	\$ 98
Technical and Support Staff	<i>Grade</i>	<i>Hourly Rate</i>
Senior Engineering Technician	T5	\$184
Engineering Technician / Designer	T4	\$162
Engineering Technician / Designer / Technical Aide	T3	\$146
Engineering Technician / Designer / Technical Aide	T2	\$130
Engineering Technician / Designer / Technical Aide	T1	\$110
Administration	T0	\$ 98

LEGAL CONSULTING SERVICES

A rate of \$475 per hour is charged for the lead consultant on any legal consulting project. Principals, Senior Engineers, and Marine Consultants Grade E6 and above, while working in support of the lead consultant, are charged out at \$400 per hour. All other associates are charged at established billing rates.

EMERGENT/OVERTIME WORK

A 20% premium may be assessed on labor for emergency work, typified by the need to reassign client priority or expend overtime to meet a client's emergent requirement. This premium will not be charged without prior discussion and approval of the client.

TERMS AND CONDITIONS OF SERVICE

1. **PROFESSIONAL SERVICES – FIXED FEE.** Where the scope of services, including reimbursable expenses, subcontracts, and outside services can be clearly defined, Glosten will customarily bill for services on a fixed fee basis. Invoices for fixed fee services will be issued monthly based on estimated percent of work scope complete unless other billing milestones and schedules are established.

2. **PROFESSIONAL SERVICES – TIME & MATERIALS.** When fixed fee services are not appropriate, Glosten will bill on a time & materials basis to a mutually agreed-upon budget. Invoices for time & materials services will be issued monthly for:

Hourly fees for services – at current published billing rates based on time, including travel time, expended on the project by professional, technical, and administrative personnel.

Expenses – billed at cost, including costs for travel as well as items such as non-routine communication, reproduction, and delivery charges.

Materials and equipment – billed at cost plus 10%

Subcontracts and outside services – billed at cost plus 10%.

Equipment and software usage fees – at current published rates.

3. **INVOICING AND PAYMENT.** Invoices will be submitted monthly for the prior month's services. Payment is due upon the invoice date and becomes delinquent thirty (30) days thereafter. A late charge will be added to delinquent amounts at the rate of 1½ percent for each thirty (30) days delinquency.

4. **SCOPE OF PROFESSIONAL SERVICES.** The entire basic scope of professional services to be provided by Glosten is described in the attached proposal. If mutually agreed to in writing by Client and Glosten, additional services may be added to the basic scope of service, understanding that payment and schedule will be adjusted accordingly.

5. **PUBLIC LIABILITY & WORKERS' COMPENSATION.** Glosten is protected by public liability insurance for bodily injury and property damage, and will furnish a certificate thereof upon request. Glosten is also protected by Washington State Industrial Insurance as required by state statute.

6. **LIMITATIONS OF PROFESSIONAL LIABILITY.** No warranty, express or implied, is made or intended by our proposal for consulting services, by our furnishing oral or written reports, or by our inspection of work. In recognition of the relative risks and benefits of the project to the Client and to Glosten, the Client agrees, to the fullest extent permitted by law, to limit the liability of Glosten and all Glosten subcontractors supporting the project for any and all claims, losses, damages, or incurred expenses from any cause, so that the total aggregate liability to Glosten and all subcontractors supporting the project is limited to \$50,000 or the total fee paid for the project, whichever is less. Such claims and losses include, but are not limited to negligence, professional errors or omissions, strict liability, and breach of contract.

7. **OTHER PROVISIONS.**

(i) One or more waivers by either or both parties of any provision, part of any provision, term, condition, or covenant of this agreement shall not be construed as a waiver by either party of any other provision, part of any other provision, term, condition, or covenant of this agreement.

(ii) Unless specifically stated in the attached proposal, Glosten and all Glosten subcontractors have no responsibility for discovery, presence, handling, removal, disposal, or exposure of personnel to hazardous or toxic materials in any form as part of the project scope.

(iii) Unless specifically stated in the attached proposal, it is understood that Glosten will not provide design and construction review services relating to safety precautions of any contractor or subcontractor on the project and further, it is understood that Glosten will not provide any supervisory services relating to the construction of the project. Any opinions from Glosten relating to any such review or supervisory services shall be considered only as general information and shall not be the basis for any claim against Glosten.

(iv) Any opinion of project cost offered by Glosten represents the judgment of a design professional and is supplied only for general guidance, but Glosten does not warrant the accuracy of its opinion as compared to actual contractor bids or actual cost.

8. **DELAYS.** Glosten will prepare drawings and specifications in a timely manner, consistent with professional care and the orderly progress of work. It is understood that a time extension will be granted to Glosten for any and all delays beyond our control (including delays in work being done by subcontractors) and which could not reasonably have been foreseen at the time this agreement was executed.

9. **TERMINATION.** Either party may terminate this agreement with seven (7) days' written notice to the other in the event of a substantial failure of performance, including non-payment, by the other party through no fault of the terminating party. If this agreement is terminated, Glosten shall be paid for services performed up to the termination notice date, including reimbursable expenses and subcontract obligations.

10. **OWNERSHIP OF DOCUMENTS.** Drawings, specifications and other documents, including those in electronic form, prepared by Glosten and its subcontractors are instruments of service for use solely with respect to this project. Glosten is the owner of these instruments of service and retains all common law, statutory and other reserved rights, including copyrights. Glosten grants to Client a non-exclusive license to reproduce Glosten's instruments of service solely for purposes of constructing, and using and maintaining the project, provided the Client complies with all obligations, including payment of all sums when due, under this agreement. Any termination of this agreement prior to completion of the project shall terminate this license. Any subsequent use or changes to the instruments of service not made or specifically approved by Glosten shall be at Client's sole risk and without liability to Glosten or its subcontractors.

11. **ELECTRONIC DOCUMENT TRANSMITTAL.** Glosten accepts liability and responsibility only for instruments of service that can be verified as having been produced and released by Glosten or its subcontractors as indicated in hard copies by a hand-applied signature or in electronic copies by a verifiable digital signature. Drawings, specifications, and other documents supplied in electronic form as editable or native format files are provided solely for convenience of the Client as non-verifiable information and therefore will not be considered instruments of service. By accepting delivery of non-verifiable electronic files, the Client acknowledges that information in the electronic files may be incorrect and/or in conflict with the contracted instruments of service.

12. **VENUE.** This agreement shall be interpreted and enforced in accordance with the laws of the State of Washington. The venue of any action brought to interpret or enforce any of the terms of this agreement or otherwise adjudicate the rights or liabilities of the parties hereto shall be in King County, Washington.