



January 12, 2023

Brad Ryan
Municipality of Skagway Manager
PO Box 415
Skagway, AK 99840

**Re: Port of Skagway: Ferry Terminal Study
KPFF Scope and Fee
Project No. 10092200154**

Mr. Ryan,

We have prepared this scope of work based on conversations with your team about the Municipality of Skagway's (MOS) desire to build a new Alaska Marine Highway System (AMHS) ferry terminal at the existing Ore Terminal. The MOS has signed a Memorandum of Understanding (MOU) with the State of Alaska Department of Transportation and Public Facilities to explore the feasibility of building a new terminal.

General Project Understanding

The MOS is exploring the possibility of building a new ferry terminal off the south end of the Ore Peninsula. This would effectively open the ferry peninsula for re-development. A new ferry terminal needs to be studied to determine its feasibility for operations, construction, permitting and cost. It is anticipated that the facilities to be developed at the Ore Peninsula would consist of an AMHS ferry berth, terminal building, vehicle staging area, parking, and associated facilities and related improvements. The development will also require the removal of existing infrastructure.

This scope of work includes performing an Operational Site Alternatives Analysis to first work with AMHS personnel to establish a general project layout to advance in design. Once the Alternatives Analysis is complete, the design team will progress the alternative to a 10% design level.

To complete this work KPFF has assembled a team of sub-consultants including:

- Hailey & Aldrich (Formerly Hart Crowser) – Geotechnical Services
- Anchor QEA – Environmental Permitting

Future phases of this work will advance the design to a 20% level of completion. The MOU indicates that design will be taken to a 20% level to fully understand the project feasibility. This may include field work such as surveys and geotechnical explorations.

KPFF has several other sub-consultants available for additional services, including survey, electrical design, Coastal and Naval Architecture design, which will all be required in the future phase of work.

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 with a summary of work completed and project status.
- Coordination with subconsultants includes weekly design meetings.
- Regular meetings with AMHS and MOS, including one in-person meeting in South-East Alaska.

Task 2: Operational Site Alternatives Analysis

The project team will perform an operational site alternatives analysis to explore several upland site arrangements and offshore berth configurations. The goal of this task will be to find a general site operational layout that meets the functions required for both upland traffic flow and offshore vessel berthing and loading. The team will explore up to three upland configurations and two vessel berth configurations and meet with AMHS and MOS to determine a final alternative to carry forward into preliminary design.

To complete this work, KPFF will review the existing AMHS terminals and understand the operational limitations and requirements for AMHS. KPFF will assemble a preliminary basis of design for the project to establish key design criteria. This document will include engineering, environmental and operational requirements. This document will be issued to the MOS and AMHS for review and comment. The intent is for this basis of design document to be carried forward into the design phases of the project.

Some of the key items that will be identified in the basis of design include:

- Range of vessel sizes
- Vessel mooring and berthing requirements
- Vessel boarding ramp, float, and trestle geometric and loading requirements
- Vehicle turning radius requirements
- Minimum building sizes
- Operational and extreme tide ranges
- Maximum design trucks and forklifts on ramps and trestles
- Length of vehicle queuing lanes
- Minimum number of parking stalls
- Utility requirements

The site operational alternatives analysis deliverables will include concept level plan drawings, the basis of design document and a comparison matrix evaluating each option.

Task 3: 10% Design

Once the final site alternative has been selected, KPFF will advance the design for major components of the project to a 10% level of design to better understand the overall project scope and cost. This

advancement will also serve to better inform the required project environmental permitting and locations for needed geotechnical explorations.

The team will advance design for the key elements of the project including:

- Upland site layouts, traffic flow plan, and analysis
- Site pavement design
- Site utilities and preliminary stormwater assessment
- Terminal building location (see additional assumptions below)
- Vessel berth
 - Berth utilities design
 - Possible berth dredging
 - Trestle and dock design
 - Transfer span and abutment design
 - Preliminary float design
 - Float stability and sizing
 - Float anchor dolphins and gravity anchors
 - Float fendering design
 - Berthing dolphin design

At this preliminary stage of design, the terminal building size will be established. The programming and layout of the building interior will be addressed in future phases of work. Other work to be completed at a future date includes electrical design and coastal modeling to determine loading of the float guide piles and anchor systems. For the purpose of this study, the design team will assume the size of the existing terminal building in Skagway is sufficient for the future project.

KPFF will work with sub-consultant Hailey & Aldrich (H&A), geotechnical engineers, to determine local design parameters for the structures. H&A will evaluate the existing geotechnical information and develop a plan and costs for additional exploration recommendations.

KPFF will also work with environmental permitting sub-consultant Anchor QEA. The team will work to establish the likely permits required to construct the project and the expected timeline to procure them. KPFF will meet regularly with Anchor QEA to understand the permitting implications of major design decisions, such as pile sizes, overwater coverage and impacts to the environment during construction.

The design team will work to assemble a Class 4/5 Rough Order of Magnitude (ROM) opinion of probable project costs based on the 10% design (see Figure 1). The ROM will have a range associated with the level of design completed for the project. As design is progressed, the accuracy of the cost estimate will increase, and this range will decrease.

ESTIMATE CLASS	Primary Characteristic	Secondary Characteristic			
	LEVEL OF PROJECT DEFINITION Expressed as % of complete definition	END USAGE Typical purpose of estimate	METHODOLOGY Typical estimating method	EXPECTED ACCURACY RANGE Typical variation in low and high ranges [a]	PREPARATION EFFORT Typical degree of effort relative to least cost index of 1 [b]
Class 5	0% to 2%	Concept Screening	Capacity Factored, Parametric Models, Judgment, or Analogy	L: -20% to -50% H: +30% to +100%	1
Class 4	1% to 15%	Study or Feasibility	Equipment Factored or Parametric Models	L: -15% to -30% H: +20% to +50%	2 to 4
Class 3	10% to 40%	Budget, Authorization, or Control	Semi-Detailed Unit Costs with Assembly Level Line Items	L: -10% to -20% H: +10% to +30%	3 to 10
Class 2	30% to 70%	Control or Bid/Tender	Detailed Unit Cost with Forced Detailed Take-Off	L: -5% to -15% H: +5% to +20%	4 to 20
Class 1	50% to 100%	Check Estimate or Bid/Tender	Detailed Unit Cost with Detailed Take-Off	L: -3% to -10% H: +3% to +15%	5 to 100

Notes: [a] The state of process technology and availability of applicable reference cost data affect the range markedly. The +/- value represents typical percentage variation of actual costs from the cost estimate after application of contingency (typically at a 50% level of confidence) for given scope.
[b] If the range index value of "1" represents 0.005% of project costs, then an index value of 100 represents 0.5%. Estimate preparation effort is highly dependent upon the size of the project and the quality of estimating data and tools.

Figure 1: AACE Classifications of ROM Estimates Based Level of Project Design

At the completion of the 10% design, KPFF will provide the following deliverables to MOS:

- 10% Design Drawings
- Updated project Basis of Design
- Rough Order of Magnitude (ROM) Construction Cost Estimate
- A graphical overall Project Schedule
- Design Summary Memo including:
 - Geotechnical Memo
 - Permitting Memo
- Draft and Final PowerPoint for public presentation

Anticipated Project Schedule

This scope and fee has been prepared using the following assumptions for the project schedule.

Initial Notice to Proceed	1/20/23
Initial Kickoff meeting with AMHS & MOS	Late Jan 2023
Draft Basis of Design Issued	Late Feb 2023
Draft Operational Site Alternatives Meeting with MOS & AMHS	Mid-March 2023
Final Alternative selected by MOS & AMHS	Early April 2023
10% Design Submitted	July 2023

Scope Assumptions and Exclusions

The following assumptions have been made in preparing this scope of work:

- Historical drawings and surveys will be provided by MOS and AHMS.
- Geotechnical explorations are excluded at this time.
- Electrical design is excluded at this time.
- Architectural design and programming of the terminal building is excluded at this time.
- Site and bathymetric surveys are excluded at this time.
- One in-person meeting will be required in South-East Alaska.

Scope Fees

The total estimated not-to-exceed maximum fee, including reimbursable expenses, for the services described in this letter is **\$199,911**. Fees will be billed on an hourly basis using the hourly rates presented on the attached fee schedule.

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

Port of Skagway: Ferry Terminal Feasibility Study



Alternatives Analysis and 10% Design
 Scope Fee Estimate
 2023-01-12

#	2023 Hourly Rate	KPFF										Subconsultants		Total
		Principal / Marine Director	Project Manager	Senior Technical Specialist	Senior Engineer	Prof. Engineer	Construction Project Manager	Design Engineer	Project Coordinator	Senior Cad Tech	CAD	Anchor QEA (Permitting)	Hailey & Aldrich (Geotech)	
		\$ 270	\$ 245	\$ 250	\$ 220	\$ 192	\$ 187	\$ 170	\$ 138	\$ 150	\$ 133			
	Task 1: Project Management & Design Coordination	6	52					12				\$ -	\$ -	\$ 16,016
1.10	Overall Project Management, Invoicing and coordination		20					12						
1.20	Meetings with AMHS & PORT	6	16											
1.30	In Person Meetings / Site Visit		16											
	Task 2: Operational Site Alternatives Analysis	4	16		36	56		88	8		32	\$ -	\$ -	\$ 43,992
2.10	Initial Document Research		8			16		24						
2.20	Basis of Design Development	2	4			16		8	4					
2.30	Upland Configuration Alternatives (3 upland concepts)				12	12		16			16			
2.40	Vessel Berth Configurations Alternatives (2 vessel berth concepts)				12	12		40			16			
2.50	Comparison Summary Matrix	2	4		12				4					
	Task 3: 10% Design	16	54		72	96		152	4	16	60	\$ 22,768	\$ 21,500	\$ 132,862
3.10	10% Basis of Design		4		12				4					
3.11	Geotechnical Preliminary Engineering												\$ 21,500	
3.20	Upland Civil Design	4	4											
3.21	General Site Layout				4			16						
3.22	Site Traffic Flow Plan & Analysis				4			16						
3.23	Site Utilities Plan				4			8						
3.30	Berth Design	4	12											
3.31	Berth Utilities Design					4		8						
3.32	Berth Dredging Design					8		24						
3.33	Trestle & Dock Design				2	8		32						
3.34	Transfer Span and Abutment Design				4	8		16						
3.35	Float Design													
3.36	Float Stability & Sizing				4	16								
3.37	Float Anchor Dolphins and Gravity Anchors				4	20								
3.38	Float Fendering Design				4	8								
3.39	Berthing Dolphin Design					24								
3.40	10% Drawings	4	8		10			24		4	60			
3.50	Rough Order of Magnitude - Construction Cost Estimate	2	12		16			8		4				
3.60	Project Feasibility Permitting Memo & Permitting Timeline											\$ 22,768		
3.70	Project Timeline Gantt Chart		6		4					4				
3.80	Project 10% Design Memo	2	8							4				

Assumptions and Notes:

1. Rates for 2023 displayed, rates will be adjusted each calendar year.

Subtotal	\$ 192,870
KPFF Expenses: Travel, Etc.	\$ 3,500
	\$ -
Subconsultant Markup	\$ 3,541
Design Total	\$ 199,911



Consulting Engineers

1601 5th Avenue, Suite 1300, Seattle, WA 98101 P: 206-382-0600 F: 206-382-0500 WWW.KPFF.COM

AGREEMENT FOR PROFESSIONAL SERVICES

DATE:	1.12/2023
JOB NUMBER:	100922200154
CLIENT:	Municipality of Skagway
PROJECT NAME:	Port of Skagway: Ferry Terminal Study
LOCATION:	Skagway, Alaska

SCOPE OF SERVICES: See detailed Scope of Work dated January 12, 2023 (Attachment 1).

SPECIAL CONDITIONS: N/A

FEE: Hourly, not to exceed \$.199,911. See Attachment 2 for detailed Fee Schedule

Offered By KPFF, Inc.

Accepted by Client

(Signature)

(Signature)

Edward J DeBroeck, PE, Associate

(Print Name/Title)

(Print Name/Title)

2023.1.12

(Date)

(Date)



TERMS AND CONDITIONS

KPFF, Inc. ("KPFF") shall perform the services outlined in this agreement pursuant to the stated fee arrangement.

1. Additional Services

Should the Scope of Services change from those set forth in the Agreement for Professional Services, the fee for such additional services will be negotiated between Client and KPFF.

2. Limitation of Liability

To the greatest extent allowed by law, the aggregate liability of KPFF for any and all injuries, claims, demands, losses, expenses or damages, of whatever kind, arising out of or in any way related to this Agreement or the services provided by KPFF on this project, shall be limited to \$50,000 or the total fee received by KPFF pursuant to this Agreement, whichever is greater. Further, no officer, director, shareholder or employee of KPFF shall bear any personal liability to Client for any and all injuries, claims, demands, losses, expenses or damages, of whatever kind or character, arising out of or in any way related to this Agreement or the services provided by KPFF on this project.

3. Mediation

All disputes between Client and KPFF arising out of or relating to this Agreement shall be submitted to nonbinding mediation prior to commencement of any other judicial proceeding.

4. Dispute Handling

KPFF shall make no claim against Client without first providing Client with a written notice of damages and providing Client thirty (30) days to cure before an action is commenced. The Client shall make no claim either directly or in a third-party claim, against KPFF unless the Client has first provided KPFF with a written certification executed by an independent professional currently practicing in the same discipline as KPFF and licensed in the state of the subject project. This certification shall a) contain the name and license number of the certifier; b) specify each and every act or omission that the certifier contends is a violation of the standard of care expected of a professional performing professional services under similar circumstances; and

c) state in complete detail the basis for the certifier's opinion that each such act or omission constitutes such a violation. This certificate shall be provided to KPFF not less than thirty (30) calendar days prior to the presentation of any claim or the institution of any judicial proceeding.

5. Suspension of Services

If Client fails to make payments to KPFF in accordance with this Agreement, such failure shall provide KPFF the option to suspend performance of services under this Agreement upon seven (7) days written notice to Client. In the event of a suspension of services, KPFF shall have no liability for any delays or damages caused because of such suspension. Before resuming services, KPFF shall be paid all sums due prior to suspension and any expenses incurred by KPFF in the interruption and resumption of its services. KPFF's fees for the remaining services and time schedules shall be equitably adjusted. If any invoice is in dispute, Client shall pay under written protest to keep the project on schedule and resolve the payment dispute after substantial completion.

6. Termination

This Agreement may be terminated by either party with seven (7) days written notice to the other in the event of a substantial failure of performance by the other party through no fault of the terminating party. If this Agreement is terminated, KPFF shall be paid for services performed to the termination notice date, including reimbursable expenses due.

7. Ownership of Documents

The drawings, calculations and specifications are instruments of service and are, and shall remain, the property of KPFF, whether the project for which they are made is executed or not. They are not to be used on other projects or extensions to this project except by agreement in writing.

8. Contract Administration

It is understood that KPFF will not provide design and construction review services relating to safety measures of any contractor or subcontractor on the project. Further, it is understood that KPFF will not provide any supervisory services relating to the construction for the project. Any opinions solicited from KPFF 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 KPFF.

9. No Third-Party Beneficiary

Nothing in this Agreement shall create a contractual relationship with or a cause of action in favor of any third party against KPFF or Client.

10. No Assignments

Neither party to this Agreement shall transfer, sublet or assign any rights under or interest in this Agreement (including but not limited to monies that are due or monies that may be due) without the prior written consent of the other party.

11. Payments

KPFF will submit monthly invoices. Payment is due on the date of the invoice and becomes delinquent one month thereafter. A late charge will be added to delinquent amounts at the rate of one-and-one-half percent (1 ½ %) for each one month of delinquency (or the maximum allowable by law, whichever is lower).



HALEY & ALDRICH, INC.
3131 Elliott Avenue
Suite 600
Seattle, WA 98121
206.324.9530

10 January 2023
File No. P203404-001

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

Attention: Ed DeBroeck, P.E., DBIA, Associate

Subject: Engineering Services
Port of Skagway Ferry Terminal Feasibility Study
Skagway, Alaska

Dear Ed DeBroeck:

This letter presents Haley & Aldrich, Inc.'s (Haley & Aldrich's) recommended scope of services and associated estimate of costs to provide feasibility level geotechnical engineering services for the proposed Ferry Terminal at the Port of Skagway in Skagway, Alaska. This proposal is based on project development information presented in the Combined Ferry Terminal Concept Exhibits dated 26 August 2022, information provided by KPFF, as well as our previous exploration, testing, and analytical work completed for the Municipality under contract to KPFF.

Project Understanding

This work is intended to assist KPFF in the geotechnical aspects of the proposed Ferry Terminal. We understand that the proposed construction for the current assessment includes a new pier to support ferry traffic extending to the south from the south end of the peninsula. Additionally, the project will include an upland Ferry Terminal Building and new pavement for ferry related traffic and loading.

We have completed a number of deep explorations at the site for the originally envisioned cruise dock project for the Municipality. Those explorations revealed the presence of fill soils overlying river deposits consisting of sands and gravels. In some areas, the gravel content is high. As part of that work, we conducted analyses of the potential for seismically-induced liquefaction. The results of those analyses indicate that the site is indeed susceptible to liquefaction based on the values of Standard Penetration Test (SPT) blowcounts and seismic shear velocity data obtained in the field. This liquefaction hazard presents challenges for the site including ground deformations due to lateral spreading and the associated load on the pile supports for the offshore structures.

Scope of Services

We will provide geotechnical engineering support to KPFF related to the alternatives assessment. This will consist of the following scope items:

- Review historical information and scoping.
- Review historical engineering soil properties.
- Provide seismic design recommendations and updated liquefaction analysis, as necessary.
- Provide preliminary axial and lateral pile design recommendations for the proposed pier structure and associated dolphin piles.
- Provide preliminary foundation recommendations for the Ferry Terminal Building.
- Provide preliminary pavement recommendations for the new pavement adjacent to the proposed Ferry Terminal Building.
- Compile a summary geotechnical memorandum for the alternatives analysis.
- Provide recommendations for future subsurface drilling and geophysical studies to support final design.
- Attend project meetings and perform project management tasks.

Assumptions

We have assumed the following in completing our estimate:

- Slope stability modeling will not be required during this preliminary phase.
- We will attend four, 1-hour each meetings.
- No additional explorations will be required for this phase of the project.

Costs

The cost of the above outlined scope of work will be approximately as follows:

Engineering	\$ 9,000
Reporting	\$ 8,000
Meetings and Project Management	<u>\$ 4,500</u>
TOTAL	\$21,500

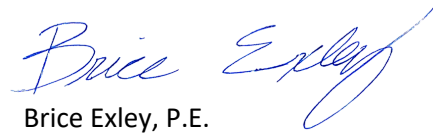
Terms and Conditions

Our services will be performed in accordance with the standard of care of our profession. The attached Rate Schedule should be incorporated into our agreement with you.

Please acknowledge your acceptance of this work by preparing the appropriate contract documents for our review and signature.

We appreciate the opportunity to submit this proposal and look forward to our association with you on this project. Please contact the undersigned if you wish to discuss this proposal or any aspect of the project.

Sincerely yours,
HALEY & ALDRICH, INC.



Brice Exley, P.E.
Principal Geotechnical Engineer



Garry Horvitz, P.E., L.E.G.
Senior Principal Geotechnical Engineer

Attachment:
Standard Fee Schedule [2023 PNW]

This proposal, and the attached "Standard Fee Schedule", are understood and accepted:

KPFF CONSULTING ENGINEERS

By _____
(authorized signature)

By _____
(print or type name)

Title _____

Date _____

FEES FOR SERVICES

Fees for services will be based on the time worked on the project by staff personnel plus reimbursable expenses. The fee will be computed as follows.

1. Labor related fees will be computed based on personnel billing rates in effect at the time the services are performed. Personnel billing rates are subject to revision on, or about, 1 January and 1 July of each year. The hourly rates are fully inclusive of fringe benefits, burden, and fee. Current rates are provided in the table below.

<i>Classification</i>	<i>Hourly Rate</i>
<i>Project Support</i>	<i>\$122</i>
<i>Technician</i>	<i>\$117</i>
<i>Project Technician</i>	<i>\$127</i>
<i>Senior Technician</i>	<i>\$143</i>
<i>Project Controls</i>	<i>\$148</i>
<i>Staff Professional 1</i>	<i>\$133</i>
<i>Staff Professional 2</i>	<i>\$159</i>
<i>Project Professional</i>	<i>\$175</i>
<i>Technical Specialist / Modeler</i>	<i>\$180</i>
<i>Project Manager / Senior Technical Specialist</i>	<i>\$212</i>
<i>Senior Project Manager / Technical Expert</i>	<i>\$249</i>
<i>Program Manager / Senior Technical Expert / Principal</i>	<i>\$286</i>
<i>Senior Principal</i>	<i>\$323</i>

2. Pre-trial conferences, depositions, and expert testimony will be billed at one and one-half (1.5) times the rates quoted above.
3. Second and Third Shift, Weekend, and Holiday hours will be billed at \$40/hour premium. Second and Third Shifts are those starting between 4 PM and 4 AM.
4. Field visits will be billed at 4-hour minimum; night shifts will be billed at 8-hour minimum. Cancellation of scheduled night shift within 24 hours will be charged the full 8 hours.
5. Direct non-salary expenses will be billed at our cost plus fifteen (15) percent, except for employee vehicle use which will be billed at IRS allowed mileage rates.
6. General project-related expenses such as mobile phone expenses (including mobile app fees); in-house reproduction; printing costs for reports, drawings, and other project records; mail and overnight document delivery; and long-term electronic and paper document storage will be billed as a general communication fee at a rate of four (4) percent of the labor charges.
7. Subcontractors will be billed at our cost plus fifteen (15) percent.
8. Equipment and laboratory testing will be billed at rates listed in the attached Equipment and Laboratory Rate Schedules, as applicable.

EQUIPMENT RATE SCHEDULE

AIR MONITORING EQUIPMENT	Daily	Weekly	Monthly
<i>Drager/Rae Sampling Kit (tubes not included)</i>	\$10	\$40	\$120
<i>Dust Monitor</i>	\$100	\$400	\$1,200
<i>Four-Gas Meter</i>	\$43	\$172	\$516
<i>Photoionization Detector - 10.6 or 11.7 eV</i>	\$70	\$280	\$840
FIELD TESTING	Daily	Weekly	Monthly
<i>Double Ring Infiltrometer</i>	\$250	---	---
<i>Field Supplies</i>	\$28	\$112	\$448
<i>Guelph Permeameter</i>	\$150	---	---
<i>Inclinometer Readings</i>	\$250	---	---
<i>Sand Cone Field Density Kit</i>	\$75	\$225	\$725
<i>pH Meter</i>	\$15	\$60	\$180
<i>Pile Load Testing (per test)</i>	\$1,500	---	---
<i>Plate Load Tester (per day)</i>	\$50	---	---
<i>Pit Box Test (per day)</i>	\$400	---	---
<i>Slug Test Kit (per day)</i>	\$350	---	---
<i>Wood Pile Load Testing (per test)</i>	\$250	---	---
SAMPLING EQUIPMENT	Daily	Weekly	Monthly
<i>Groundwater Sampling Bundle with Bladder Pump</i>	\$315	\$1,000	\$3,000
<i>Groundwater Sampling Bundle with Peristaltic Pump</i>	\$250	\$750	\$2,100
<i>Groundwater Sampling Bundle with Grundfos Pump</i>	\$350	\$1,100	\$3,100
<i>Rotohammer Drill</i>	\$100	\$400	---
<i>Soil Sampling or Tank Pull Equipment Bundle</i>	\$150	\$350	\$1,050
<i>Soil Vapor Sampling Bundle</i>	\$400	\$1,400	\$2,600
<i>Turbidity Meter</i>	\$20	\$80	\$240
<i>YSI Meter with Flow Cell</i>	\$100	\$400	\$1,200
WATER LEVEL METERS AND INTERFACE PROBES	Daily	Weekly	Monthly
<i>Barologger</i>	\$10	\$40	\$120
<i>Levelogger</i>	\$25	\$100	\$300
<i>Oil/Water Interface Probe</i>	\$50	\$200	\$600
<i>Water Level Indicator</i>	\$20	\$80	\$240
GEOTECHNICAL INSTRUMENTATION	Daily	Weekly	Monthly
<i>Cone Penetrometer</i>	\$15	\$60	\$180
<i>Crack Monitors - Electronic Datalogger</i>	---	\$120	\$360
<i>Dynamic Cone Penetrometer</i>	\$150	---	---
<i>Electronic Readout Box</i>	\$25	\$100	\$300
<i>Geokon LC-2 Single Channel Logger</i>	---	\$80	\$240
<i>Geokon - CR 800 Vibrating Wire Datalogger with Modem</i>	---	\$100	\$300
<i>Geokon GK 401 Vibrating Wire Readout Box</i>	\$50	\$100	\$300
<i>In-Place Inclinometer Rental</i>	---	---	\$1,250
<i>Modem</i>	---	---	\$250
<i>Nuclear Density Gauge</i>	\$100	\$300	\$900

EQUIPMENT RATE SCHEDULE (continued)

GEOTECHNICAL INSTRUMENTATION (continued)	Daily	Weekly	Monthly
<i>Power System - Battery</i>	\$5	\$20	\$60
<i>Power System - Solar</i>	\$15	\$60	\$180
<i>Seismograph - Manual</i>	\$75	\$225	\$725
<i>Seismograph - Remote Units</i>	\$100	\$275	\$825
<i>Tiltmeter</i>	---	\$150	\$450
<i>Vibration and Sound Monitoring Station</i>	\$125	\$325	\$925
<i>VDV Web Service</i>	---	---	\$200
MISCELLANEOUS	Daily	Weekly	Monthly
<i>Camera - Digital</i>	\$10		
<i>Decontamination Kit (each)</i>	\$50	---	---
<i>Drone</i>	\$250	\$1,000	---
<i>Field Truck (including fuel)</i>	\$95	\$380	\$1,140
<i>Generator</i>	\$50	\$200	\$600
<i>GeoTech Sample Jars 16 oz. (per box)</i>	\$10	---	---
<i>GPS Unit</i>	\$150	\$600	\$1,800
<i>Harness with Restraint Lanyard</i>	\$40	\$160	\$480
<i>Motorola CP200d Radio (pair)</i>	---	\$35	\$140
<i>Personal Protective Equipment - Level C (per person)</i>	\$45	---	---
<i>R/V Catalyst - 26 Ft Sampling Vessel</i>	\$600	---	---
<i>Research Nets</i>	\$60	---	---
<i>Sampling Tubing (roll)</i>	\$20	---	---
<i>Saximeter II</i>	\$35	\$140	\$420
<i>Sound Level Meter</i>	\$50	\$200	\$600
<i>Tool Trailer</i>	\$300	---	---

LABORATORY RATE SCHEDULE

SOIL CLASSIFICATION AND INDEX TESTS	Unit Price
<i>Atterberg Limits - 1 Point</i>	\$125
<i>Atterberg Limits - 3 Point</i>	\$180
<i>Grain Size - Hydrometer and Sieve Analysis</i>	\$300
<i>Grain Size - 200 Wash</i>	\$100
<i>Grain Size- Sieve Analysis (Standard Sample)</i>	\$125
<i>Grain Size - Sieve Analysis (Bulk Sample)</i>	\$150
<i>Grain Size - Hydrometer</i>	\$175
<i>Water Content</i>	\$25
<i>Organic Content</i>	\$75
<i>Specific Gravity</i>	\$125
<i>Visual Classification</i>	\$15
SOIL MOISTURE-DENSITY TESTS	Unit Price
<i>Bulk Density</i>	\$100
<i>California Bearing Ratio (CBR)</i>	\$650
<i>Proctor - 1 Point</i>	\$120
<i>Proctor - 4 Point</i>	\$250
<i>Proctor - 4 Point (Cohesive Soil)</i>	\$300
SOIL CONSOLIDATION AND STRENGTH TESTS	Unit Price
<i>Consolidation - Constant Rate of Strain (CRS)</i>	\$650
<i>Consolidation - Incremental</i>	\$500
<i>Unconfined Compression</i>	\$100
<i>Direct Simple Shear (DSS)</i>	\$300
<i>Cyclic Direct Simple Shear (CDSS)</i>	\$650
<i>Triaxial Compression - Isotropic Consolidation</i>	\$500
<i>Triaxial Compression - Ko/anisotropic Consolidation</i>	\$800
<i>Triaxial Compression - Unconsolidated</i>	\$300
SURCHARGE RATES	Unit Price
<i>Atterberg Limits Dry Prep</i>	\$15
<i>Atterberg Limits Organic Classification</i>	\$40
<i>Sample Preparation</i>	\$120
<i>Triaxial High Pressure (over 100 psi)</i>	\$100
<i>Tube Cut (per cut)</i>	\$25
<i>Tube Extrusion</i>	\$100

Additional H&A Laboratory analyses, pricing, and rush rates available upon request.

Scope of Work

January 10, 2023

Skagway Ferry Terminal Project Permitting Evaluation

KPFF

Project Understanding

This Scope of Work includes effort for Anchor QEA, LLC, to support KPFF in evaluating alternatives for the Municipality of Skagway (MOS) Ferry Terminal Project (Project). The MOS is considering moving the ferry terminal operations to new facilities to be constructed on the Ore Peninsula in Skagway Harbor. This scope of work is for Anchor QEA to evaluate the permitting requirements and timelines that would likely apply to the Project and to support KPFF in presenting this information in an easy-to-understand format to assist the MOS in decision making.

Scope of Services and Deliverables

This Scope of Work includes the following task:

- Task 1: Develop Permit Memorandum and Flow Chart

Task 1: Develop Permit Memorandum and Flow Chart

KPFF has provided two alternative conceptual designs for the new ferry terminal facilities. Each includes a new ferry moorage structure, dolphins and loading/unloading dock and gangways located in and over water. Each alternative also includes a new upland ferry terminal building and new parking and road lanes on the Ore Peninsula for vehicle queuing and entrance/exit from the terminal area.

Anchor QEA will support KPFF and the MOS by reviewing and providing input into a written project narrative, graphics, and drawings (developed by KPFF) that capture the major elements of the two conceptual alternatives. The level of detail will be sufficient to support an evaluation of likely permit requirements and to explain the Project activities to the MOS and other potentially interested parties. For example, it will be important to describe types of proposed activities and compare their relative impacts and any permitting differences between the two alternatives, but exact dimensions and other engineering details will not be necessary at this stage.

Based on the general project narrative and drawings provided by KPFF, Anchor QEA will develop a memorandum describing permits that are likely to be required from federal, state, and local agencies for the two alternatives. The memorandum will include a text summary; a table listing each permit, application submittal requirements, and anticipated timing for permit review and issuance; and a flow chart illustrating the anticipated permit process for each alternative.

This task includes time for Anchor QEA staff to attend virtual meetings with KPFF and MOS to discuss the Project and permitting considerations. The attached budget assumes attendance by three Anchor QEA staff members at four 1-hour virtual meetings. It also includes 2 hours for Anchor QEA to contact agency staff by phone or email with preliminary questions about permitting requirements and timelines.

Deliverables

- Preliminary draft, draft, and final permitting memorandum with attached table and flow chart for each alternative

Assumptions

- KPFF will provide conceptual-level Project narrative, drawings, and graphics for each alternative suitable for inclusion with the permitting memorandum and for presentation to the MOS and other potentially interested parties.
- Anchor QEA will prepare a preliminary draft permitting memorandum for KPFF review. Following receipt of KPFF comments, Anchor QEA will prepare a draft version for MOS review. Anchor QEA will incorporate MOS comments and prepare the final version.
- No fieldwork, site visits, or in-person agency meetings are included in this Scope of Work.
- Anchor QEA will evaluate likely permitting requirements for two conceptual Project alternatives. Each alternative will include similar in-water, overwater, and upland construction activities. The primary differences between the alternatives will be in the relative amount of overwater cover and number of piles, and inclusion of dredging in one alternative.
- Only one alternative will include dredging.
- Both alternatives will include upland work at the existing ferry terminal (demolition and construction) to accommodate new uses.
- This Scope of Work does not include development of a detailed Project description or other materials suitable for permit applications.
- Regulatory requirements are likely to include, but may not be limited to:
 - Federal Rivers and Harbors Act (Section 10)
 - Federal and State Clean Water Act (Sections 404, 401 and 402, including those held by the current ferry terminal)
 - Federal Section 408 review (for any nearby federal civil works projects)
 - Federal Endangered Species Act
 - Federal Marine Mammal Protection Act
 - Federal private aids to navigation approval
 - Federal Magnuson-Stevens Fishery Conservation Act
 - Federal and State historical and cultural resources protection
 - State fish and wildlife protection
 - MOS land use, demolition, grading, and building permits

Budget

Anchor QEA proposes to perform this Scope of Work on a time-and-materials basis for an amount not to exceed \$22,768. A detailed estimate of Anchor QEA costs is provided in Appendix A.

Anchor QEA's 2023 labor billing rates are provided in Appendix B.

Anchor QEA will communicate closely with KPFF on project/budget status and will notify KPFF as soon as possible in the event that changes in scope are anticipated. Anchor QEA will not exceed the budgeted amount shown in Appendix A without prior authorization by KPFF.

ACCEPTED BY:

Tom Wang, P.E.
Member
Anchor QEA, LLC

Date

Bob Riley, P.E.
Principal
KPF

Date

Appendix A
Budget

ANCHOR QEA, LLC

2023 LABOR BUDGET ESTIMATING FORM

01/10/23

Skagway Ferry Terminal Project Permitting Evaluation

Task 1 Develop Permit Memo and Flow Chart

Labor Categories	Billing Rate	Task 1	Total Hours	Total Dollars
Principal	\$ 323	10.0	10.0	\$ 3,230
Senior Manager	\$ 288	12.0	12.0	\$ 3,456
Senior Staff	\$ 236	16.0	16.0	\$ 3,776
Staff 3	\$ 210	50.0	50.0	\$ 10,500
Senior Technical Editor	\$ 168	6.0	6.0	\$ 1,008
Project Coordinator	\$ 133	6.0	6.0	\$ 798
Total Hours		100	100	
Total Labor		\$ 22,768		\$ 22,768
Average Hourly Rate	\$ 228			
TOTAL COSTS		\$ 22,768		\$ 22,768

Appendix B

Anchor QEA 2023 Billing Rates

Anchor QEA, LLC

2023 BILLING RATES

Professional Level Hourly Rates

Principal.....	\$323
Senior Manager.....	\$288
Manager.....	\$269
Senior Staff.....	\$239
Staff 3.....	\$210
Staff 2.....	\$188
Staff 1.....	\$158
Senior CAD ¹ Designer.....	\$166
CAD Designer.....	\$139
Technician.....	\$140
Senior Technical Editor.....	\$168
Technical Editor.....	\$139
Senior Project Coordinator.....	\$161
Project Coordinator.....	\$133

Special Hourly Rates

National expert consultant.....	\$547
All work by a testifying expert.....	1.5 times professional level rate
Expert Advisor.....	\$389

EXPENSE BILLING RATES

Expense Rates

Computer Modeling (per hour).....	\$10.00
Graphic Plots (varies with plot size).....	\$3-\$6/sf
Mileage (per mile).....	Current Federal Standard

FEE ON LABOR AND EXPENSE CHARGES

Subcontracts/subconsultants.....	10%
Travel and other direct costs.....	10%
Field equipment and supplies.....	10%

¹ CAD: Computer Aided Design