



April 1, 2022

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

**Re: Skagway Ore Dock Development Project – Design & Permitting
KPFF Scope and Fee Amendment 02
Project No. 10092100135**

Brad,

We have prepared this scope of work based on conversations with your team about the Municipality of Skagway's (MOS) preferred option from the completed Alternatives Analysis.

General Project Understanding

KPFF understands that the Municipality takes possession of the Peninsula in March of 2023 when the current lease with White Pass expires. The MOS is interested in the reconfiguration of the waterfront to accommodate the newest generation of cruise vessels and support industrial activity more effectively.

This scope amendment follows the Alternatives Analysis phase of the project during which KPFF evaluated several alternatives for floats and various additive alternatives. Based on the provided Alternatives Analysis report and discussions, the MOS has requested that KPFF proceed with the following:

Design Items

1. Demolition of existing structures
 - a. Timber dock
 - b. Mooring dolphins
 - c. Ore loader and associated support structures
 - d. Concrete dock
2. New 500'x50' steel floating dock supporting cruise operations
 - a. Procurement specification and bid package
 - b. Access structures from the upland
 - c. Connection of existing upland utilities to the float
 - d. Guide piling
3. New RORO (roll-on, roll-off) ramp supporting barge services
 - a. Access structures from the upland
 - b. RORO ramp hydraulic slide system

- c. RORO ramp lift float system
 - d. Guide piling
- 4. Dolphins
 - a. Demolished dolphins will be replaced with new dolphins
 - b. The two southernmost dolphins will be reinforced
 - c. Access catwalks to new and reinforced dolphins
- 5. Fuel header relocation and dolphin integration
 - a. The existing fuel header adjacent to the existing ore loader will be demolished and located on a dolphin with an integrated containment pit.
- 6. Power
 - a. Existing overhead powerlines will be demolished and relocated underground
- 7. North berth extension
 - a. Demolish the existing AML concrete dock
 - b. Dredge and armor the remaining slope to extend the existing berth further north
 - c. Material sampling of the dredge spoils for contaminants

KPFF has assembled a team of subconsultants to aid in design and permitting including:

1. Anchor QEA – Environmental permitting & Dredge Sampling / Permitting
2. Hart Crowser – Geotechnical Engineering
3. Glostén – Naval Architecture – Float and wave modeling
4. Norton Corrosion – Corrosion Protection Design
5. Echelon Engineering – Dive Survey
6. Maul Foster & Alongi, Inc. – Hazardous Material Sampling (for demolition items)
7. Blue Coast - Coastal Engineer - Design of riprap slope armoring
8. Respec – Electrical Engineering & Upland Survey
9. Hughes – Bathymetric Survey
10. Tetra Tech – RORO Ramp Controls Design

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 and periodic coordination with the upland designer.
- This task also includes regular bi-weekly meetings with MOS to discuss questions and make collaborative decisions on the direction of the project.
- An allowance for up to (2) miscellaneous site visits as requested by MOS

Task 2: 30% Design

KPFF will advance the design for major components of the project to 30% Design to better understand the overall project scope and construction sequencing. This advancement will also serve to better inform the required project environmental permitting.

The current preliminary schedule for this project assumes that construction will take place over the course of two winters to accommodate the cruise season. KPFF will work with the MOS to establish a construction phasing plan to determine which project elements will be completed in each phase.

At the conclusion of this task KPFF will present the project in person at in a public meeting format in Skagway, AK. KPFF will also prepare 3-dimensional (3D) renderings of the project for the purposes of this presentation.

Additional tasks part of the 30% Design include:

1. Performing an upland survey of the surrounding areas and documenting the extents of the existing elements to be demolished.
2. Bathymetry of the site
3. Performing an underwater dive inspection on the structures identified to remain or be reinforced as part of this project. An inspection report will be provided summarizing the conditions found.
4. Site geometry verification with vessel mooring and arrangement verification via discussions with stakeholders and local pilots.
5. Mooring and berthing calculations to establish the demands on the floats and mooring dolphins.
6. Work with subconsultant Hart Crowser to establish the site seismic criteria for the inground structures.
7. Meet with the MOS planning department and Fire Marshal to review the project.

At the completion of the 30% design KPFF will provide the following deliverables to MOS:

1. 30% Design Drawings
2. Site Survey & Underwater Survey Report
3. Updated Project Basis of Design
4. Updated Rough Order of Magnitude (ROM) Cost Estimate
5. Updating the overall project schedule
6. Draft and Final PowerPoint for public presentation
7. Project 3D Renderings for Public Display

Task 3: Float Procurement

Concurrent with the 30% Design phase KPFF will prepare a float procurement package for public bidding by the MOS. KPFF and subconsultant Glisten Associates (Naval Architects) will provide bid support by reviewing float bidder qualifications. Following bid award KPFF and the design team will work with the

float Manufacturer to review design submittals throughout the design of the float. KPFF will also review material, coatings, and inspection reports throughout the construction of the float.

Additional tasks part of Float Procurement include:

1. Prepare steel float bid drawings and specifications
2. Provide bid support responding to bidder questions
3. Provide bid selection guidance
4. Review steel float submittals by the selected bidder

At the completion of Float Procurement KPFF will provide the following deliverables to MOS:

1. Steel Float Bid Drawings and Specifications
2. Reviewed float submittals (calculations, materials, and drawings)

Task 4: Project Environmental Permitting

During the (Task 2) 30% Design phase, KPFF will support permitting requirements for Items 1 through 6 included in this scope as defined above. Subconsultant Anchor QEA will lead the permitting efforts, coordinate the applications, and work the local, state and federal permitting agencies. See the detail scope of work attached for additional information. KPFF will Develop and submit permit drawings and applications based on 30% Design deliverables. During the permit review process KPFF will provide environmental permit support responding to permitting agency review comments

Project Environmental Permitting Deliverables:

1. Draft and Final Environmental Permit Applications

Tasks 5 & 6: 60% Design & 90% Design

Following the receipt of 30% Design review comments by the MOS, KPFF will engage the design team to advance to 60% Design. Similarly, the design team will advance to 90% Design following receipt of 60% Design review comments by the MOS.

60% and 90% Design Deliverables:

1. 60% & 90% Design Drawings
2. Updated ROM Cost Estimate
3. Updated Overall Project Schedule
4. Project Specification Outline at 60% and project specifications at 90%
5. Updated Project Renderings
6. At the 90% Completion level a Building Permit Application will be submitted

Task 7: 100% Design

After the 90% documents have been reviewed by the MOS KPFF will engage the design team to continue towards a 100%/ Bid ready completion level.

100% Design Deliverables:

1. 100% Design Drawings
2. Updated ROM Cost Estimate
3. Updated Overall Project Schedule
4. 100% Project Specifications

Task 8: Bidding Documents and Bid Support

After completion of the 100% submittal KPFF and the design team will provide KPFF will work with the MOS to assemble following services:

1. Prepare bidding documents based on the 100% design
2. Provide bid support responding to bidder questions
3. Provide bid selection guidance
4. KPFF will lead a mandatory pre-bid site walk with bidders

Bidding Deliverables:

1. Bid Drawings
2. Bid Specifications
3. Bid Form

Task 9: Grant Application Support

KPFF will provide support as needed to the MOS for grant writing and figure development. KPFF has budgeted approximately \$45,000 for this task and will bill based on the actual amount of time and effort required.

Task 10: North Berth Extension Dredge Sampling Plan and Permitting Support

The MOS has selected to explore the possibility of adding length to the existing berth at the Ore Dock by demolishing the AML dock and dredging out the existing slope. KPFF will work closely with subconsultant Anchor QEA to develop the plans, permits and sampling plan for this additional task.

Anchor QEA has provided a detailed scope of work addressing the many steps and coordination required to create a dredge sampling plan. As detailed in the attached scope, the sampling plan may vary greatly in the requirements, making an estimate of the sampling difficult at this time. The design team will work with contractors and sampling firms to get pricing for the sampling once the plan is approved. For the purposes of budgeting, **KPFF has included an allowance for \$1,000,000 for sampling** based on the approximately costs of sampling during the Gateway Project. This cost may vary based on permitting agency requirements at the time of application.

During the sampling plan work KPFF will advance dredge to a 30% design completion level in task 11 to prepare permit drawings. Once the sampling has been completed, the results will be documented and summarized in a report. Then the permitting process will be progressed.

North Berth Extension Sampling and Permitting Deliverables:

1. Sampling Plan for ADEC Approval
2. Sampling costs proposal
3. Sampling Report
4. Draft and Final Environmental Permit Applications

Task 11: North Berth Extension Design and Bid Support

KPFF will work with Blue Coast, Anchor QEA, and HartCrowser to advance the design of the north berth extension. KPFF will work with the design team to advance design to the 90% and 100% level, while providing documents to MOS for review at each milestone. This includes:

1. Advance the design through the 30%, 90%, and 100% design stages
2. Develop bidding documents based on the 100% design
3. Provide bid support responding to bidder questions
4. Provide bid selection guidance

North Berth Design Deliverables:

1. 30%, 90%, and 100% Design Drawings
2. 30%, 90%, and 100% ROM Cost Estimates
3. 30%, 90%, and 100% Project Specifications
4. Bid Drawings
5. Bid Specifications
6. Bid Form

Schedule

Following notice to proceed (NTP), expected in Mid-April, KPFF expects proceed with the following schedule, see the attached detailed Gantt chart schedule for additional details.

- Task 2 – 30% Design will be completed in Late June 2022
- Task 3 – Float Bid Package would be completed in Late June 2022
- Task 4 – The overall Project Permits would be ready for Submission in July 2022
- Task 5 – The 60% Design would be completed in December 2022
- Task 6 – The 90% Design will be completed in April 2023
- Task 7 – The Bid Documents will be issued in May 2023
- Task 10 – Permitting and Sampling program for North Extension
 - Sampling plan will be submitted in July 2022 for initial review
 - Sampling Approved in September 2022
 - Sampling Cost provided to MOS by October 2022
- Task 11 –30% design for berth extension to be completed by June of 2023 (after sampling program complete)

Scope Assumptions

The work of this project will require that the following be provided by the MOS

1. Access to the site for dive surveys, upland survey and in-water bathometric surveys
2. Historical drawings and surveys will be provided
3. The MOS will provide reviews of each design submittal within 2 weeks of submission
4. KPFF will participate in up to 5 onsite meetings or observations with two engineers

Scope Exclusions

The following items are not included as part of this scope, however KPFF is ready to provide these as additional services if required:

1. Design of structures or other mechanical components not explicitly defined
2. Geotechnical explorations
3. Permit Fees
4. Construction Management
5. Construction Support Services

Scope Amendment Fees

This is the second scope amendment for the project. The total estimated not-to-exceed maximum fee, including reimbursable expenses, for the services described in this letter is **\$3,430,000**. An additional budgetary allowance of **\$1,000,000 for dredge sampling is also included:**

Design Amendment:	\$3,430,000
Dredge Sampling Allowance:	\$1,000,000
Total Amendment Request:	\$4,430,000

Project Funds to Date:	\$330,478
Total Project Budget including this Amendment:	\$4,760,478

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. All work will be performed in accordance with the attached Terms and Conditions.

We appreciate this opportunity to work with the Municipality 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

1. Detailed Fee Schedule
2. Conceptual Project Schedule Gantt Chart
3. Sub-Consultant Proposals

Skagway Ore Peninsula Multiuse Dock and RORO Dock Design

Scope Fee Estimate
4/1/2022



#	2022 Hourly Rate	KPFF									Subconsultants				Total
		Principal	Project Manager	Senior Technical Specialist	Senior Engineer	Prof. Engineer	Design Engineer	Project Coordinator	Senior Cad Tech	CAD	Anchor QEA		Hart Crowser	Other Sub Consultant	
											Environmental Permitting	Dredge Sampling & Permitting	Geotechnical Services	Electrical, Naval Architect, Survey, Hazardous Materials, Dive, Controls	
		\$ 250	\$ 205	\$ 230	\$ 205	\$ 180	\$ 160	\$ 129	\$ 140	\$ 124					
	Task 1: Project Management & Design Coordination	147	254			170		336			\$ 43,650	\$ -	\$ 46,290	\$ 20,013	\$ 272,717
	Overall Project Management, Invoicing and coordination		20					112			\$ 43,650		\$ 46,290	\$ 20,013	
	Bi Weekly Coordination meeting with Port of Skagway (65 weeks)	33	50			50		100							
	Weekly Design Coordination meetings	50	100			100		100							
	Coordination with upland designer		20			20									
	Allowance for (2) miscellaneous site visits as requested	64	64					24							
	Task 2: 30% Design	58	116	56	320	1252	540	20	40	176	\$ -	\$ -	\$ 62,175	\$ 251,521	\$ 772,220
2.01	Demolition of Existing Structures	4	8												
	Timber Dock					16	8		8						
	Mooring Dolphins					16	8		8						
	Ore Loader Demo				32	16			12						
	Hazardous Materials Testing and Evaluation					24	8							\$ 44,651	
	Concrete Dock Demo					16	12		8						
	Demolition Drawings					24				16					
	QA/QC					12									
2.02	500'x50' Steel Floating Dock and Associated Structures	6	32			4								\$ 87,200	
	Float Guide Piles				6	32	32								
	Float Access Gangway and Connections				4	40	32								
	Design Iterations as Required					40									
	Float Access Trestle				4	40	32								
	Float Access Trestle Platform Upland Coordination					8	4								
	Float Fire Protection and Water Service Design	2				12	32			16					
	Float Electrical													\$ 11,460	
	Float Controls													\$ 30,000	
	Float Drawings					40				24					
	QA/QC					24								\$ 1,236	
2.03	RORO Ramp & Associated Structures	4													
	RORO Ramp Design				24	80									
	RORO Ramp Access Trestle Platform					16	24								
	RORO Ramp Float Tank Systems				24	32	32								
	RORO Ramp Hinge & Slide System				24	80	32								
	RORO Ramp Guide Piles Dolphins				4	32	40								
	RORO Ramp Trestle Upland Integration					8	4								
	RORO Ramp Drawings					40				24					
	QA/QC				32										
2.04	Mooring Dolphins and Mooring Design														
	Southern Dolphin Reinforcement Design					16	20								
	Mooring Dolphin Design					16	20								
	Check Existing Dolphins to Remain					16	20								
	Catwalks to Mooring Dolphins					16	40								
	Optimoor Mooring Analysis for 3 vessel sizes in 2 configurations				32	32	20								
	Dolphin Drawings					40				24					
	QA/QC				8	24									
2.05	Fuel Header and Piping														
	Fuel Header					24	16								
	Fuel Header Dolphin Platform				12	32	16								
	Fuel Line Catwalks and Pipe Supports				12	32	16								
	Fuel Piping Design	1		8		20	12								
	Fuel Header and Piping Drawings					32				16					
	QA/QC				8	16									
2.06	Powerline Relocation to Underground Utilities													\$ 18,650	
	Upland Coordination					40	24			24					
	Powerline Relocation Drawings				4	16			4	16					
	QA/QC				8										
2.08	30% Cathodic Protection Design	1	4			16								\$ 10,886	
2.09	30% Specifications - [NOT USED]														
2.10	ROM Cost Estimate	4	8		40	40		8							

Skagway Ore Peninsula Multiuse Dock and RORO Dock Design



Scope Fee Estimate
4/1/2022

#	2022 Hourly Rate	KPFF									Subconsultants				Total
		Principal	Project Manager	Senior Technical Specialist	Senior Engineer	Prof. Engineer	Design Engineer	Project Coordinator	Senior Cad Tech	CAD	Anchor QEA		Hart Crowser	Other Sub Consultant	
											Environmental Permitting	Dredge Sampling & Permitting	Geotechnical Services	Electrical, Naval Architect, Survey, Hazardous Materials, Dive, Controls	
		\$ 250	\$ 205	\$ 230	\$ 205	\$ 180	\$ 160	\$ 129	\$ 140	\$ 124					
2.11	Overall Project Schedule		8			24									
2.12	Project Basis of Design		2			8									
2.13	Site Survey		2		4									\$ 8,340	
2.14	Bathymetry				2	4								\$ 7,500	
2.15	Dolphin Dive Inspection (Echelon & KPFF Dive)		4		40									\$ 31,598	
2.16	Construction Phasing Plan Development w/the MOS	4	16			24				16					
2.17	Project 3D Rendering for Public Display					80	20								
2.18	Presentation to P&H and the MOS (onsite)	32	32		12			12							
	Task 3: Float Procurement	4	40		18	180	80			16	\$ -	\$ -		\$ -	\$ 60,074
3.01	Float Bid Drawings and Specifications	4	20		10	60	20			16					
3.02	Bid Support and Evaluation		20		4	40	20								
3.03	Submittal Review				4	80	40								
	Task 4: Project Environmental Permitting	12	20		36	32	96		20	96	\$ 84,306	\$ -	\$ -	\$ -	\$ 134,610
4.01	Permit Coordination	4	20												
4.02	Draft Permit Drawings	2			8	16	40		12	40					
4.03	Final Permit Drawings	2			8	16	40		8	40					
4.04	Permit Support	4			20	16	16			16					
	Task 5: 60% Design	84	240	168	748	2752	1192	44	48	336	\$ -	\$ -	\$ 27,280	\$ 50,627	\$ 1,080,227
5.01	Demolition of Existing Structures	8	16												
	Timber Dock					16	16		8						
	Mooring Dolphins					16	16		8						
	Ore Loader Demo				16	16			8						
	Hazardous Materials Testing and Evaluation - [NOT USED]														
	Concrete Dock Demo					16	16		8						
	Demolition Drawings					16				16					
	QA/QC					24									
5.02	500'x50' Steel Floating Dock and Associated Structures	24	120			16									
	Float Guide Piles				24	60	32								
	Float Access Gangway and Connections				16	60	40								
	Design Iterations as Required					40									
	Float Access Trestle				16	60	40								
	Float Access Trestle Platform Upland Coordination					32	16								
	Float Fire Protection and Water Service Design	8				40	40			40					
	Float Electrical														
	Float Controls													\$ 30,000	
	Float Drawings					160				40					
	QA/QC					80									
5.03	RORO Ramp & Associated Structures	16													
	RORO Ramp Design				80	280									
	RORO Ramp Access Trestle Platform					60	80								
	RORO Ramp Float Tank Systems			80	120	160	80								
	RORO Ramp Hinge & Slide System			80		160	80								
	RORO Ramp Guide Piles Dolphins				16	120	100								
	RORO Ramp Trestle Upland Integration					32	16								
	RORO Ramp Drawings					120				40					
	QA/QC				120										
5.04	Mooring Dolphins and Mooring Design														
	Southern Dolphin Reinforcement Design					40	60								
	Mooring Dolphin Design					40	60								
	Check Existing Dolphins to Remain					40	60								
	Catwalks to Mooring Dolphins					60	80								
	Optimoor Mooring Analysis for 3 vessel sizes in 2 configurations				60	60	40								
	Dolphin Drawings					60				40					
	QA/QC				40										
5.05	Fuel Header and Piping														
	Fuel Header					80	40								

Skagway Ore Peninsula Multiuse Dock and RORO Dock Design



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4/1/2022

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		Principal	Project Manager	Senior Technical Specialist	Senior Engineer	Prof. Engineer	Design Engineer	Project Coordinator	Senior Cad Tech	CAD	Anchor QEA		Hart Crowser	Other Sub Consultant	
											Environmental Permitting	Dredge Sampling & Permitting	Geotechnical Services	Electrical, Naval Architect, Survey, Hazardous Materials, Dive, Controls	
		\$ 250	\$ 205	\$ 230	\$ 205	\$ 180	\$ 160	\$ 129	\$ 140	\$ 124					
	Fuel Header Dolphin Platform				40	80	40								
	Fuel Line Catwalks and Pipe Supports				40	80	40								
	Fuel Piping Design	2		8		80	40								
	Fuel Header and Piping Drawings					80				40					
	QA/QC				32										
5.06	Powerline Relocation to Underground Utilities													\$ 14,630	
	Upland Coordination					140	80			40					
	Powerline Relocation Drawings				16		60		16	40					
	QA/QC				32										
5.07	60% Cathodic Protection Design	2	4			24								\$ 5,997	
5.08	60% Specifications					24									
5.09	ROM Cost Estimate	4	16		80	80		32							
5.10	Overall Project Schedule		16			40									
5.11	Construction Phasing Plan Development w/the MOS	16	60			80				40					
5.12	Project 3D Rendering for Public Display Update					80	20								
5.13	Presentation to P&H and the MOS	4	8					12							
	Task 6: 90% Design & Building Permits	28	80	56	250	960	438	20	20	92	\$ -	\$ -	\$ 11,440	\$ 31,390	\$ 390,028
6.01	Demolition of Existing Structures	2	4												
	Timber Dock					8	4		4						
	Mooring Dolphins					8	4		4						
	Ore Loader Demo				8	8			4						
	Hazardous Materials Testing and Evaluation					8	4								
	Concrete Dock Demo					12	6		4						
	Demolition Drawings					12				4					
	QA/QC					16									
6.02	500'x50' Steel Floating Dock and Associated Structures	6	32			4									
	Float Guide Piles				6	24	24								
	Float Access Gangway and Connections				4	24	24								
	Design Iterations as Required														
	Float Access Trestle				4	24	24								
	Float Access Trestle Platform Upland Coordination					8	4								
	Float Fire Protection and Water Service Design	2				12	24			4					
	Float Electrical														
	Float Controls													\$ 10,000	
	Float Drawings					20				12					
	QA/QC					32									
6.03	RORO Ramp & Associated Structures	4													
	RORO Ramp Design				24	40									
	RORO Ramp Access Trestle Platform					16	24								
	RORO Ramp Float Tank Systems			24	32	40	24								
	RORO Ramp Hinge & Slide System			24		40	24								
	RORO Ramp Guide Piles Dolphins				4	24	24								
	RORO Ramp Trestle Upland Integration					8	4								
	RORO Ramp Drawings					20				12					
	QA/QC				32										

Skagway Ore Peninsula Multiuse Dock and RORO Dock Design



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4/1/2022

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											Environmental Permitting	Dredge Sampling & Permitting	Geotechnical Services	Electrical, Naval Architect, Survey, Hazardous Materials, Dive, Controls	
		\$ 250	\$ 205	\$ 230	\$ 205	\$ 180	\$ 160	\$ 129	\$ 140	\$ 124					
6.04	Mooring Dolphins and Mooring Design														
	Southern Dolphin Reinforcement Design					16	20								
	Mooring Dolphin Design					16	20								
	Check Existing Dolphins to Remain					16	20								
	Catwalks to Mooring Dolphins					16	40								
	Optimoor Mooring Analysis for 3 vessel sizes in 2 configurations				32	32	20								
	Dolphin Drawings					20				12					
	QA/QC				8										
6.05	Fuel Header and Piping														
	Fuel Header					24	16								
	Fuel Header Dolphin Platform				12	32	16								
	Fuel Line Catwalks and Pipe Supports				12	32	16								
	Fuel Piping Design	1		8		20	12								
	Fuel Header and Piping Drawings					20				12					
	QA/QC				8										
6.06	Powerline Relocation to Underground Utilities														
	Upland Coordination					24	12			12					\$ 21,390
	Powerline Relocation Drawings				4		8		4	8					
	QA/QC				8										
6.07	90% Cathodic Protection Design	1	4			16									
6.08	90% Specifications					100									
6.09	ROM Cost Estimate	4	8		40	40		8							
6.10	Overall Project Schedule		8			24									
6.11	Construction Phasing Plan Development w/the MOS	4	16			24				16					
6.12	Project 3D Rendering for Public Display Update					80	20								
6.13	Presentation to P&H and the MOS	4	8		12			12							
	Task 7: 100% Drawings	14	38	6	56	234	74	14	10	20	\$ -	\$ -	\$ 18,815	\$ 19,456	\$ 122,067
7.01	Demolition of Existing Structures	2	2												
	Timber Dock					2	2		2						
	Mooring Dolphins					2	2		2						
	Ore Loader Demo				2	2			2						
	Hazardous Materials Testing and Evaluation [NOT USED]														
	Concrete Dock Demo					2	2		2						
	Demolition Drawings					2				2					
	QA/QC														
7.02	500'x50' Steel Floating Dock and Associated Structures	2	8			2									
	Float Guide Piles				2	2	2								
	Float Access Gangway and Connections				2	2	2								
	Design Iterations as Required					2									
	Float Access Trestle				2	2	2								
	Float Access Trestle Platform Upland Coordination					2	2								
	Float Fire Protection and Water Service Design					2	2			2					
	Float Electrical														
	Float Controls														\$ 10,000
	Float Drawings					10				2					
	QA/QC														

Skagway Ore Peninsula Multiuse Dock and RORO Dock Design

Scope Fee Estimate
4/1/2022



#	2022 Hourly Rate	KPFF									Subconsultants				Total
		Principal	Project Manager	Senior Technical Specialist	Senior Engineer	Prof. Engineer	Design Engineer	Project Coordinator	Senior Cad Tech	CAD	Anchor QEA		Hart Crowser	Other Sub Consultant	
											Environmental Permitting	Dredge Sampling & Permitting	Geotechnical Services	Electrical, Naval Architect, Survey, Hazardous Materials, Dive, Controls	
		\$ 250	\$ 205	\$ 230	\$ 205	\$ 180	\$ 160	\$ 129	\$ 140	\$ 124					
7.03	RORO Ramp & Associated Structures	2													
	RORO Ramp Design				2	2									
	RORO Ramp Access Trestle Platform					2	2								
	RORO Ramp Float Tank Systems			2	2	2	2								
	RORO Ramp Hinge & Slide System			2		2	2								
	RORO Ramp Guide Piles Dolphins				2	2	2								
	RORO Ramp Trestle Upland Integration					2	2								
	RORO Ramp Drawings					2				2					
	QA/QC				8										
7.04	Mooring Dolphins and Mooring Design														
	Southern Dolphin Reinforcement Design					4	4								
	Mooring Dolphin Design					4	4								
	Check Existing Dolphins to Remain					4	4								
	Catwalks to Mooring Dolphins					4	4								
	Optimoor Mooring Analysis for 3 vessel sizes in 2 configurations														
	Dolphin Drawings					4				2					
	QA/QC				2										
7.05	Fuel Header and Piping														
	Fuel Header					2	2								
	Fuel Header Dolphin Platform				2	2	2								
	Fuel Line Catwalks and Pipe Supports				2	2	2								
	Fuel Piping Design	0		2		2	2								
	Fuel Header and Piping Drawings					2				2					
	QA/QC				2										
7.06	Powerline Relocation to Underground Utilities														\$ 7,155
	Upland Coordination					2	2			2					
	Powerline Relocation Drawings				2		2		2	2					
	QA/QC				2										
7.07	100% Cathodic Protection Design	0	2			2									\$ 2,301
7.08	100% Specifications					40									
7.09	ROM Cost Estimate	2	12		10	20		2							
7.10	Overall Project Schedule		2			6									
7.11	Construction Phasing Plan Development w/the MOS	2	4			6				4					
7.14	Project 3D Rendering for Public Display Update					80	20								
7.15	Presentation to P&H and the MOS	4	8		12			12							
	Task 8: Bid Support	22	88			132		48		16	\$ -	\$ -	\$ -	\$ -	\$ 2,040
8.01	Prepare Bid Forms	4	8			12		24							
8.02	Finalize Front End Specifications Div. 00 & 01	8	20			40									
8.03	Prepare & hold Pre-Bid Meeting and site walk	4	40			32		24							
8.04	Respond to Bidder Questions, & Issue up to 3 Addenda to Bid Documents	2	8			40			4	16					\$ 2,040
8.05	Provide Post Bid Analysis, Hold Post Bid meeting with apparent Winner	4	12			8									
	Task 9: Grant Application Support	8	60			80	80			32	\$ -	\$ -	\$ -	\$ -	\$ 45,468
9.01	Grant Application Support	8	60			80	80			32					
	Task 10: North Berth Extension Dredge Sampling Plan and Permitting Support	8	60		16	72				48	\$ 137,164	\$ -	\$ -	\$ -	\$ 173,656
10.01	North Dredge Sampling Plan & Exhibits	4	20			32			4	16					
10.02	Coordination with ADEC		20								\$ 73,442				
10.03	<i>Dredge Sampling (Future Task)</i>														
10.04	Permit Drawing and Application Support	4	20		16	40			4	32	\$ 63,722				

Skagway Ore Peninsula Multiuse Dock and RORO Dock Design

Scope Fee Estimate
4/1/2022



#	2022 Hourly Rate	KPFF									Subconsultants				Total
		Principal	Project Manager	Senior Technical Specialist	Senior Engineer	Prof. Engineer	Design Engineer	Project Coordinator	Senior Cad Tech	CAD	Anchor QEA		Hart Crowser	Other Sub Consultant	
											Environmental Permitting	Dredge Sampling & Permitting			
		\$ 250	\$ 205	\$ 230	\$ 205	\$ 180	\$ 160	\$ 129	\$ 140	\$ 124					
	Task 11: North Dredge Berth Extension Design (30%, 60%, 100%)	22	48		20	212	148		8	80	\$ -	\$ 62,636	\$ -	\$ 30,000	\$ 184,956
11.01	30%, 60%, 100% Design, and Bid Documents	8	40		8	80	100		8	80					
11.02	Dredge Specification	2	8		4	40									
11.03	ROM Cost Estimate					60	40								
11.04	QA/QC	8			8	16									
11.05	Bid Support and Evaluation	4				16	8								

Assumptions and Notes:

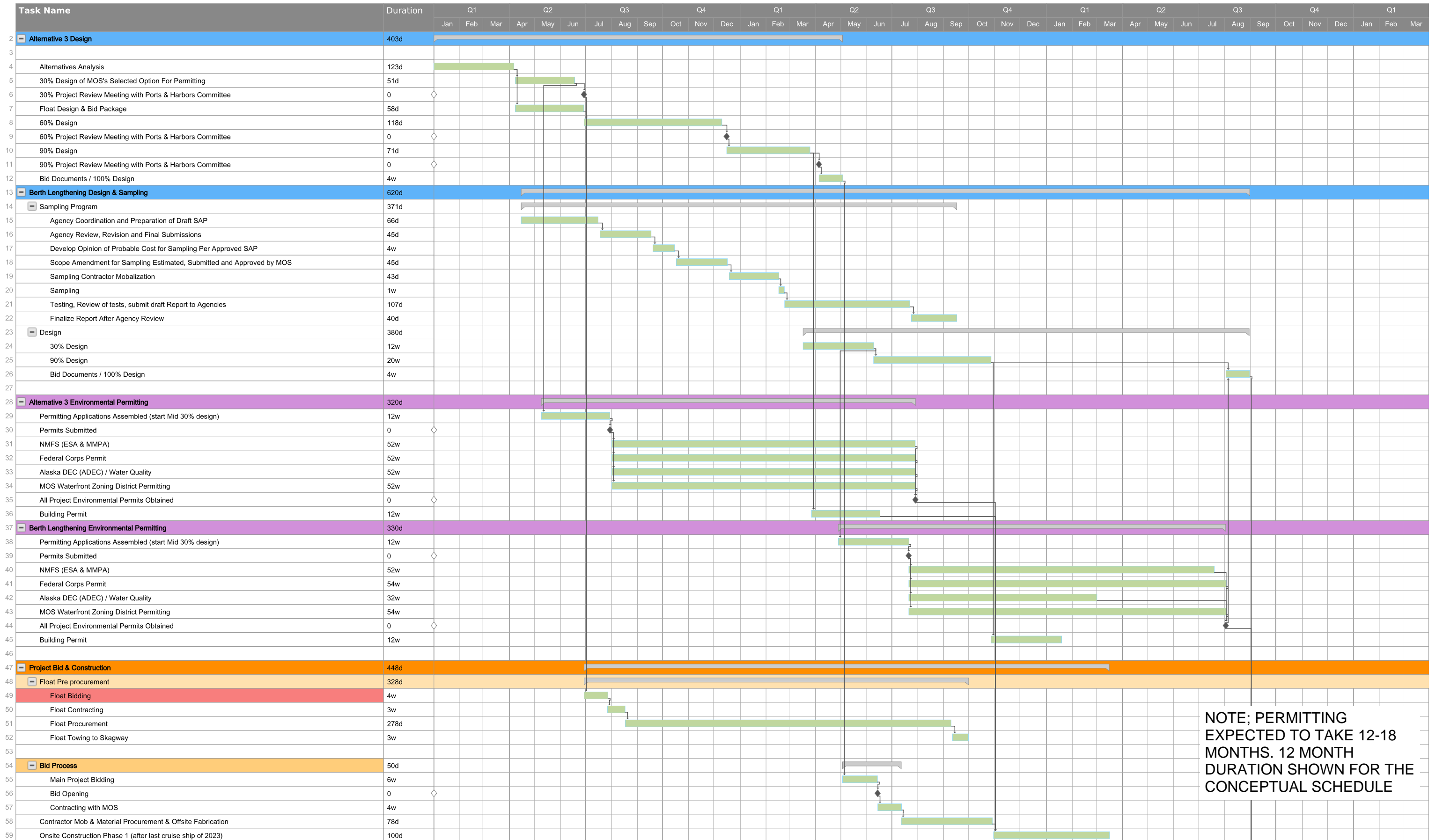
- Rates for 2022 displayed, rates will be adjusted each calendar year
- Reimbursable expenses will be billed at cost with no markup
- Permit fees are not included and will be billed as reimbursable expenses
- This scope does not include construction support services at this time but will be scoped at the completion of design
- This scope estimate does not include construction management services
- This scope and fee estimate includes a budgetary allowance for sampling, actual costs may vary
- This scope and fee has budgeted for up to 5 onsite meetings for two KPFF engineers

Subconsultant Summary	Fee	Expenses	Total
Anchor QEA - Environmental Permitting	\$ 327,756	\$ 320	\$ 328,076
Hart Crowser - Geotechnical	\$ 166,000	\$ -	\$ 166,000
Glosten Associates - Naval Architecture	\$ 87,200	\$ -	\$ 87,200
Norton Corrosion Limited - Corrosion Protection	\$ 30,433	\$ -	\$ 30,433
Echelon Engineering - Dive Survey	\$ 31,598	\$ 26,396	\$ 57,994
Maul Foster & Alongi, Inc. - Hazardous Materials Testing	\$ 44,651	\$ 6,578	\$ 51,229
Blue Coast - Coastal Engineering	\$ 30,000	\$ -	\$ 30,000
Respec - Electrical Engineering	\$ 85,325	\$ 351	\$ 85,676
Respec - Site Survey	\$ 8,340	\$ 3,370	\$ 11,710
Hughes - Bathymetric Survey	\$ 7,500	\$ -	\$ 7,500
Tetra Tech - RORO Ramp Controls	\$ 80,000	\$ -	\$ 80,000
Subtotal	\$ 898,803	\$ 37,015	\$ 935,819
Subconsultant Markup 8%	\$ 71,904	\$ -	\$ 71,904
Total Subconsultants (Fee, Expenses & Markup)	\$	\$	1,007,723

Subtotal	\$ 3,294,000
KPFF Expenses: Travel, Etc.	\$ 25,000
Subconsultant Expenses: Travel, Etc.	\$ 37,015
Subconsultant Markup	\$ 71,904
Design Total	\$ 3,430,000
Sampling Allowance	\$ 1,000,000
Design & Soil Sampling Total	\$ 4,430,000

Fee Summary	
Task 1: Project Management & Design Coordination	\$ 272,717
Task 2: 30% Design	\$ 772,220
Task 3: Float Procurement	\$ 60,074
Task 4: Project Environmental Permitting	\$ 134,610
Task 5: 60% Design	\$ 1,080,227
Task 6: 90% Design & Building Permits	\$ 390,028
Task 7: 100% Drawings	\$ 122,067
Task 8: Bid Support	\$ 57,516
Task 9: Grant Application Support	\$ 45,468
Task 10: North Berth Extension Dredge Sampling Plan and Permitti	\$ 173,656
Task 11: North Dredge Berth Extension Design (30%, 60%, 100%)	\$ 184,956

CONCEPTUAL SCHEDULE - SKAGWAY ORE DOCK PROJECT



NOTE; PERMITTING EXPECTED TO TAKE 12-18 MONTHS. 12 MONTH DURATION SHOWN FOR THE CONCEPTUAL SCHEDULE

Task Name	Duration	Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4			Q1		
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
60 Berth Lengthening Bidding & Contracting	100d																											
61 Onsite Construction Phase 2 (Berth Lengthening & overall project)	100d																											
62 Construction Complete	0																											



March 24, 2022

Ed DeBroeck, PE
Associate
KPFF
1601 Fifth Avenue, Suite 1300
Seattle, WA 98101

RE: Fee Proposal – Skagway Ore Peninsula Dock

Ed:

We are grateful for the opportunity to provide you with a fee proposal for electrical design for the upcoming dock project alongside the Ore Peninsula in Skagway. This follows the preliminary work that we recently completed.

Our scope of work in general includes the following tasks:

- Replace the existing overhead electrical and communications lines with new underground feeders as required. This might not include the existing transmission line feeding the submarine cable to Haines as it intended to be replaced with a new feeder and submarine cable from a different site.
- Support demolition of the ore loader, existing dock, and overhead lines.
- Replace the existing electrical equipment for the dock with new as required.
- Provide electrical equipment and lighting on the floating dock and ramp.
- Provide electrical circuits for the capstans and lighting on the gangways and dolphins as needed.
- Provide electrical equipment and lighting as needed for the RORO ramp and fuel pier.
- Provide uplands lighting.
- Include provisions for a possible future cold ironing project to bring shore power to the cruise ships.

We will incorporate our work into submittals as you have outlined in your draft letter to the MOS. I am including work supporting the design for the floating dock. I foresee needing to identify cable tray or duct requirements for circuits and structural bracketing for light poles and electrical equipment. If the ramp to the floating dock is part of this submittal, we will coordinate support bracket requirements as needed to support the electrical cables.

We offer our services on a time and expense basis at an estimated fee of \$85,676. My summarized fee for electrical design with detail worksheets included are attached. Craig Ranson is sending a separate proposal for our land surveying support.

The schedule looks to be aggressive, but reasonable. We are anxious to get started. Please contact me with any questions or additional information.

Sincerely,

Benjamin Haight, PE
Principal | Electrical Engineer

Attached: Fee Worksheets.

9109 MENDENHALL MALL RD.
SUITE 4
JUNEAU, AK 99801
907.780.6060



Skagway Ore Peninsula Dock
03/23/22
SUMMARY

	Phase	Electrical	Survey	ODCs	Total
1	#100 - Project Management	\$10,000.00	\$0.00	\$0.00	\$10,000.00
2	#410 - Design (30%)	\$18,650.00	\$0.00	\$351.40	\$19,001.40
3	#450 - Float Design (100%)	\$11,460.00	\$0.00	\$0.00	\$11,460.00
4	#420 - Design (60%)	\$14,630.00	\$0.00	\$0.00	\$14,630.00
5	#430 - Design (90%) & Permits	\$21,390.00	\$0.00	\$0.00	\$21,390.00
6	#440 - Documents (100%)	\$7,155.00	\$0.00	\$0.00	\$7,155.00
7	#490 - Bid Support	\$2,040.00	\$0.00	\$0.00	\$2,040.00
8	# -	\$0.00	\$0.00	\$0.00	\$0.00
9	# -	\$0.00	\$0.00	\$0.00	\$0.00
	Subtotal	\$85,325.00	\$0.00	\$351.40	\$85,676.40
	Est Tax				\$0.00
	Total				\$85,676.40



Phase	1
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#100 - Project Management	Principal Elec. Eng	Senior Elec. Eng	Project Elec. Eng	Staff Elec. Eng	Lead Eng Tech	Staff Eng Tech	Tech Editor	Admin Staff	Hourly Subtotal	Cost
Billing Rate	\$240.00	\$200.00	\$160.00	\$135.00	\$110.00	\$95.00	\$115.00	\$85.00		
Team Kickoff	2	2							4	\$880.00
Team Coordination Bi-weekly Meetings (24 ea)		24							24	\$4,800.00
Client Meetings (5 ea)	5	5							10	\$2,200.00
Project Administration	6							8	14	\$2,120.00
									0	\$0.00
									0	\$0.00
									0	\$0.00
									0	\$0.00
Hourly Subtotal	13	31	0	0	0	0	0	8	52	
Cost	\$3,120.00	\$6,200.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$680.00		\$10,000.00

Phase	2
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#410 - Design (30%)	Principal Elec. Eng	Senior Elec. Eng	Project Elec. Eng	Staff Elec. Eng	Lead Eng Tech	Staff Eng Tech	Tech Editor	Admin Staff	Hourly Subtotal	Cost
Billing Rate	\$240.00	\$200.00	\$160.00	\$135.00	\$110.00	\$95.00	\$115.00	\$85.00		
Plan Development			2			6			8	\$890.00
Demolition Drawings		4	20			20			44	\$5,900.00
Site Reconnaissance		8	8						16	\$2,880.00
Utility Meetings		6	6						12	\$2,160.00
Site Layout Drawings		2	20			12			34	\$4,740.00
Design Narrative			6						6	\$960.00
ROM Cost Estimate Update			4						4	\$640.00
QC	2								2	\$480.00
									0	\$0.00
									0	\$0.00
Hourly Subtotal	2	20	66	0	0	38	0	0	126	
Cost	\$480.00	\$4,000.00	\$10,560.00	\$0.00	\$0.00	\$3,610.00	\$0.00	\$0.00		\$18,650.00



Phase	3									
#450 - Float Design (100%)	Principal Elec. Eng	Senior Elec. Eng	Project Elec. Eng	Staff Elec. Eng	Lead Eng Tech	Staff Eng Tech	Tech Editor	Admin Staff	Hourly Subtotal	Cost
Billing Rate	\$240.00	\$200.00	\$160.00	\$135.00	\$110.00	\$95.00	\$115.00	\$85.00		
Plan Development						2			2	\$190.00
Equipment Layout		2	6			8			16	\$2,120.00
Duct/Cable Tray Layout		2	14			8			24	\$3,400.00
Details		4	10			8			22	\$3,160.00
Design Narrative			2						2	\$320.00
Specification		4							4	\$800.00
ROM Cost Estimate			4						4	\$640.00
QC	2								2	\$480.00
Submittal			1			2			3	\$350.00
									0	\$0.00
Hourly Subtotal	2	12	37	0	0	28	0	0	79	
Cost	\$480.00	\$2,400.00	\$5,920.00	\$0.00	\$0.00	\$2,660.00	\$0.00	\$0.00		\$11,460.00



Phase										
4										
#420 - Design (60%)	Principal Elec. Eng	Senior Elec. Eng	Project Elec. Eng	Staff Elec. Eng	Lead Eng Tech	Staff Eng Tech	Tech Editor	Admin Staff	Hourly Subtotal	Cost
Billing Rate	\$240.00	\$200.00	\$160.00	\$135.00	\$110.00	\$95.00	\$115.00	\$85.00		
Plan Background Update						2			2	\$190.00
Duct Bank Layout & Details		8	20			30			58	\$7,650.00
Lighting Layout		2				24			26	\$2,680.00
Utility Coordination Meetings		6	2						8	\$1,520.00
Design Narrative Update			2						2	\$320.00
Cost Estimate			4						4	\$640.00
Specification Outline		4							4	\$800.00
QC	2								2	\$480.00
Submittal			1			2			3	\$350.00
									0	\$0.00
									0	\$0.00
									0	\$0.00
Hourly Subtotal	2	20	29	0	0	58	0	0	109	
Cost	\$480.00	\$4,000.00	\$4,640.00	\$0.00	\$0.00	\$5,510.00	\$0.00	\$0.00		\$14,630.00



Phase	5									
#430 - Design (90%) & Permits	Principal Elec. Eng	Senior Elec. Eng	Project Elec. Eng	Staff Elec. Eng	Lead Eng Tech	Staff Eng Tech	Tech Editor	Admin Staff	Hourly Subtotal	Cost
Billing Rate	\$240.00	\$200.00	\$160.00	\$135.00	\$110.00	\$95.00	\$115.00	\$85.00		
Plan Background Updates						2			2	\$190.00
Layout Updates			4			2			6	\$830.00
Circuit Details		2	16			20			38	\$4,860.00
Single Line Diagrams		2	16			16			34	\$4,480.00
Panel Schedules			4			4			8	\$1,020.00
Equipment Schedules		2	4		6	4			16	\$2,080.00
Detail Drawings		2	16			20			38	\$4,860.00
Specification		8							8	\$1,600.00
Design Narrative Update			2						2	\$320.00
Cost Estimate Update			2						2	\$320.00
QC	2								2	\$480.00
Submittal			1			2			3	\$350.00
									0	\$0.00
									0	\$0.00
Hourly Subtotal	2	16	65	0	6	70	0	0	159	
Cost	\$480.00	\$3,200.00	\$10,400.00	\$0.00	\$660.00	\$6,650.00	\$0.00	\$0.00		\$21,390.00



Phase											
6											
#440 - Documents (100%)	Principal Elec. Eng	Senior Elec. Eng	Project Elec. Eng	Staff Elec. Eng	Lead Eng Tech	Staff Eng Tech	Tech Editor	Admin Staff	Hourly Subtotal	Cost	
Billing Rate	\$240.00	\$200.00	\$160.00	\$135.00	\$110.00	\$95.00	\$115.00	\$85.00			
Plan Updates						1			1	\$95.00	
Circuit Updates			4			6			10	\$1,210.00	
Details		2	12		2	12			28	\$3,680.00	
Schedule Updates			4			4			8	\$1,020.00	
Specification Updates			2						2	\$320.00	
QC	2								2	\$480.00	
Final Submittal			1			2			3	\$350.00	
									0	\$0.00	
									0	\$0.00	
Hourly Subtotal	2	2	23	0	2	25	0	0	54		
Cost	\$480.00	\$400.00	\$3,680.00	\$0.00	\$220.00	\$2,375.00	\$0.00	\$0.00		\$7,155.00	

Phase											
7											
#490 - Bid Support	Principal Elec. Eng	Senior Elec. Eng	Project Elec. Eng	Staff Elec. Eng	Lead Eng Tech	Staff Eng Tech	Tech Editor	Admin Staff	Hourly Subtotal	Cost	
Billing Rate	\$240.00	\$200.00	\$160.00	\$135.00	\$110.00	\$95.00	\$115.00	\$85.00			
Bidder Questions & Clarifications		2	2						4	\$720.00	
Addendums			6						6	\$960.00	
Bid Review		1	1						2	\$360.00	
									0	\$0.00	
									0	\$0.00	
									0	\$0.00	
Hourly Subtotal	0	3	9	0	0	0	0	0	12		
Cost	\$0.00	\$600.00	\$1,440.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$2,040.00	



Phase	2
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#410 - Design (30%)

Billing Rate	Unit	Unit Cost	Electrical	Survey	Qty	Cost
Copies/Prints/Scans (Letter)	ea	\$0.10			0	\$0.00
Copies/Prints/Scans (11x17)	ea	\$0.20			0	\$0.00
Copies/Prints/Scans (Full Size)	ea	\$1.00			0	\$0.00
Teleconference Costing	hr/line	\$3.00			0	\$0.00
Airfare	ea	\$300.00	1		1	\$300.00
Rentals	day	\$0.00			0	\$0.00
Survey GPS Rental	day	\$309.00			0	\$0.00
Shipping	ea	\$25.00			0	\$0.00
Parking	day	\$16.00	1		1	\$16.00
Hotel	day	\$250.00			0	\$0.00
Mileage	mile	\$0.585			0	\$0.00
Per Diem	man day	\$118.00	0.3		0.3	\$35.40
Cost			\$351.40	\$0.00		\$351.40



March 24, 2022

Alan Chun, PE
KPFF
1601 5th Ave., Suite 1300
Seattle, WA 98101
Alan.chun@kpff.com

Dear Alan:

RE: Fee Proposal – Skagway Waterfront Topographic Survey

RESPEC is pleased to present this fee proposal to provide topographic design surveying and mapping at the Ore Dock in Skagway, Alaska.

The items of interest to be surveyed include the following within the dotted red rectangle on the exhibit below:

- Utilities and appurtenances including hydrants, valves and nearby catch basins
- Powerlines
- Fuel Lines and Associated Headers
- Utility Locate within 30' of proposed ramp locations
- Top of bank
- Curbs
- Edge of concrete/asphalt
- Dolphins (top corners of decking)
- Edge of water as safety allows
- Sanitary and storm sewer outfalls
- Spot elevations for grade and drainage



1028 AURORA DRIVE
FAIRBANKS, AK 99709
907.452.1414



RESPEC can provide this service for the lump sum fee of **\$11,710**. A cost breakdown is attached at the end of this letter.

The fee and services are based on our understanding of the project and the following assumptions and exceptions.

- / Fee includes one round-trip mobilization from Juneau to Skagway for one two-man crew. Airfare, lodging, vehicle rental and per diem are included.
- / Alaska Power and Telephone (AP&T) and the Municipality of Skagway will be contacted in advance for underground utility locates. Underground utilities marked on the ground at the time of the field survey will be incorporated into the topographic survey drawing.
- / The deliverable is an AutoCAD Civil3D topographic survey drawing with surface model and a signed one-sheet topographic survey drawing depicting survey control, improvements, and contours at the 1-foot interval.

Thank you for this opportunity; we look forward to beginning this work. Please call if you have any questions or comments.

Sincerely,

Craig Ranson, PLS
Principal – Land Development Director



KPFF Skagway Waterfront Survey
03/24/22
SUMMARY

	Phase	Survey	ODCs	Total
1	#803 - Topographic Survey	\$8,340.00	\$3,370.00	\$11,710.00
2	# -	\$0.00	\$0.00	\$0.00
3	# -	\$0.00	\$0.00	\$0.00
	Subtotal	\$8,340.00	\$3,370.00	\$11,710.00
	Est Tax			\$0.00
	Total			\$11,710.00

Scope of Work

Skagway Ore Peninsula Development Project

KPFF

Project Understanding

This Scope of Work includes effort for Anchor QEA, LLC, to support KPFF with permitting, dredge material characterization, and dredge design as part of the Municipality of Skagway (MOS) Ore Peninsula Development Project (Project). The MOS takes possession of the Ore Peninsula in March 2023 when the current lease with White Pass & Yukon Route (WP&YR) expires. Several of the existing waterfront facilities are anticipated to be replaced to accommodate the newest generation of cruise vessels. KPFF is leading the Project design.

The main Project components include the following:

- Demolition of existing structures:
 - Timber docks
 - Mooring dolphins
 - Ore loader
 - Concrete dock
 - Overhead electrical lines
- New 500- by 50-foot steel cruise ship floating dock
 - Procurement specification and bid package
 - Connection of existing upland utilities to the float
- New gangway to the cruise ship floating dock
- New guide piles for the cruise ship floating dock
- Reinforcement of existing dolphins
- New mooring dolphins and access catwalks
- New roll-on roll-off (RORO) ramp and access trestle
- New fuel header dolphin
- New underground power lines
- AML Dock demolition, dredge, and armoring of the slope (North Berth Extension)

This Scope of Work includes effort for Anchor QEA to support Project permitting (Task 4), North Berth Extension dredge material characterization and permitting (Task 10), North Berth Extension dredge design (Task 11), and routine project management and meetings (Task 1) through April 2024.

Scope of Services and Deliverables

This Scope of Work includes the following tasks:

- Task 1: Project Management and Design Coordination
- Task 4: Ore Peninsula Project Permitting
- Task 10: North Berth Extension Dredge Material Characterization and Permitting
- Task 11: North Berth Extension Dredge Design

Task 1: Project Management and Design Coordination

Anchor QEA will provide monthly invoices to KPFF with a summary of work completed and project status specific to Anchor QEA's tasks. As part of this task, Anchor QEA will attend up to 15 meetings (teleconferences) with the MOS to discuss project status and questions. For budgeting purposes, a duration of 2 years (24 months, through April 2024) is assumed.

Deliverables

- None

Assumptions

- Meetings with the MOS are assumed to be 1 hour in duration.
- Meetings with KPFF and/or regulatory agencies related to permitting, dredge material characterization, and/or dredge design are included in Tasks 4, 10, and 11 as described below.

Task 4: Ore Peninsula Project Permitting

Upon completion of the 30% design package, Anchor QEA will work with KPFF and the MOS to develop a written project description that captures all elements of the Ore Peninsula improvements (with the exception of the replacement of the AML pier and associated navigational dredging, which are addressed in Task 10 of this scope of work). This task includes completing applicable permit applications, developing supplemental regulatory materials, and developing required permit figures. Specifically, Anchor QEA will develop the following regulatory materials:

- US Army Corps of Engineers (USACE) Rivers and Harbors Act Section 10 permit application package including:
 - Project description
 - USACE permit application
 - Permit figures
- Section 106 of the National Historic Preservation Act (NHPA) compliance memorandum
- Marine Mammal Protection Act (MMPA) Letter of Authorization (LOA) application

- Endangered Species Act (ESA) Biological Assessment (BA) addressing Project considerations related to ESA-listed species and Magnuson-Stevens Fishery Conservation Act Essential Fish Habitat (EFH)

This task also includes time for coordinating with applicable agencies on regulatory considerations for the Project. Time is included for phone meetings with the USACE, National Marine Fisheries Service (NMFS), U.S. Fish and Wildlife Service (USFWS), and MOS to address Project regulatory considerations. Anchor QEA will also submit and track the permit application materials through receipt of required permits and approvals.

Deliverables

- Draft and Final USACE Rivers and Harbors Act Section 10 permit application package
- Draft and Final NHPA compliance memorandum
- Draft and Final MMPA LOA application
- Draft and Final ESA BA and EFH assessment

Assumptions

- Anchor QEA will be the primary point of contact for applicable regulatory agencies.
- A mitigation plan will not need to be developed because the USACE does not typically require compensatory mitigation for impacts associated with Section 10 permit issuance.
- National Environmental Policy Act (NEPA) requirements for the Project will be addressed internally by the USACE, and no NEPA documentation will need to be developed by Anchor QEA.
- No Section 408 resources will be impacted by the Project.
- The Project will not impact bald or golden eagles and therefore a take permit from USFWS will not be required.
- A National Pollutant Discharge Elimination System (NPDES) Construction General Permit will not be required.
- The Project site is owned by the MOS, and therefore a Department of Natural Resources (DNR) permit will not be required.
- KPFF will develop the building permit package for the Project. Anchor QEA will not need to provide any support to KPFF for development of the building permit package.
- This scope of work does not include development of a Private Aid to Navigation (PATON) permit application. If a PATON is required for the Project, this scope of services may need to be amended.
- KPFF will provide Anchor QEA with all design drawings for the Project in AutoCAD. Anchor QEA will create permit-ready figures from KPFF's design drawings.
- KPFF will provide supporting information for the LOA including pile sizes, installation measures, duration of pile driving, and other pertinent Project information.

- The USACE will not require a Section 404(b)(1) alternatives analysis for the Project. If a Section 404(b)(1) alternatives analysis is required by the USACE, this scope may need to be modified.
- Anchor QEA will not develop a MMPA Plan of Cooperation under this Scope of Work.
- No local (MOS) or state (Alaska State Departments) permits or approvals will be required for the Project.
- KPFF will obtain any needed building permits for the Project.
- Permits and approvals not specifically mentioned in this Scope of Work are not included and would be considered additional work, subject to negotiations.
- Due to the uncertainty associated with the regulatory agency review process, Anchor QEA cannot guarantee the outcome of the environmental permitting and ESA processes and whether the approvals required for the Project will ultimately be issued by the applicable regulatory agencies.
- For all deliverables, Anchor QEA will provide a draft deliverable, respond to a single, consolidated set of comments from the client, and finalize the deliverable.
- All draft deliverables to KPFF and the MOS will be provided in Word and PDF formats.
- Final deliverables for agency submittal will be provided in either PDF or printed as required by the agencies.
- Because the Project would likely require 2 years for construction, an LOA is expected to be the appropriate MMPA incidental take authorization.
- No fieldwork, site visits, or in-person agency meetings related to permitting are included in this Scope of Work.
- The ore loader and potentially other elements of the existing infrastructure that would be removed to accommodate the Project may be more than 50 years old and therefore must be assessed for eligibility under the NHPA.
- An Inadvertent Discovery Plan to address Section 106 considerations will not be developed for the Project.

Task 10: North Berth Extension Dredge Material Characterization and Permitting

A phased approach is recommended for dredge material characterization as part of the North Berth Extension. The first phase, which is included in this Scope of Work as Subtask 10.1, includes agency coordination during development and finalization of the dredge material sampling and analysis plan (SAP) to define the characterization approach and scope, and to maximize the potential to beneficially reuse a portion of the dredged materials, which could help offset future disposal costs (i.e., when compared to upland landfill disposal of the total dredge material volume). The first phase includes agency review of a draft SAP, revisions to the draft SAP to address agency and client comments, and submittal of a final SAP.

The second phase, which will be described in a future Scope of Work, will identify the scope and budget needed to complete field investigations, analytical testing and data validation, and reporting per the approved SAP. This phased approach will significantly reduce the amount of uncertainty in estimated sampling and laboratory testing costs, which depend largely on agency feedback regarding the sampling approach, specific contractor sampling methods and costs, and timing of the work in Skagway.

Subtask 10.1: Agency Coordination, Sampling and Analysis Plan, and Opinion of Probable Cost for SAP Implementation

Anchor QEA will coordinate with the USACE (Alaska District), Alaska Department of Environmental Conservation (DEC), and U.S. Environmental Protection Agency (EPA; collectively, Agencies) to identify the characterization requirements for sediments within the anticipated North Berth dredge area in accordance with Alaska's environmental regulations and dredge material guidance. Based on previous dredge characterization activities completed in Skagway Harbor, it is anticipated that the Agencies will require characterization of dredge material and the anticipated post-dredge surface (i.e., z-layer) prior to issuing permits for the Project.

To address Agency requirements, a SAP will be prepared that describes the conceptual dredging plan (e.g., project ranking, total dredge volume, number of dredge material management units, and plan for disposal); site history to inform a review of potential contaminant sources, including previous characterization data; figures showing the site location and cross sections showing the dredge prism; sampling design and plan for chemical testing of sediment samples (and potential biological testing of sediment); quality assurance procedures; project schedule; and a separate health and safety plan (HASP) for the proposed field investigation.

In the absence of Alaska dredge material characterization guidance, the SAP will be prepared in accordance with Washington State Dredged Material Management Program (DMMP) guidance (whose development was led by the USACE Seattle District's Dredged Material Management Office). The sampling and testing approach in the SAP will be developed and negotiated with the Agencies in a way that aims to maximize the portion of the dredged materials that potentially can be beneficially reused, which could help offset future disposal costs (compared to upland landfill disposal of the total dredge material volume).

To help streamline Agency approval of the SAP, Anchor QEA will hold up to three 1-hour meetings (teleconferences) with the Agencies to discuss the proposed SAP approach. It is assumed that two meetings will be held prior to submittal of the draft SAP and one following receipt of Agency comments on the draft SAP, prior to finalization.

Based on the Agency-approved SAP, Anchor QEA will prepare a detailed opinion of probable cost to identify field sampling and analytical testing, and results reporting costs. Anchor QEA will perform

outreach to drilling contractors to identify different sampling options and associated costs for collecting subsurface sediment samples within the Project footprint.

For budgeting purposes, twelve 1-hour meetings (teleconferences) are assumed for coordination with the Project team (KPFF and Hart Crowser) during development and finalization of the SAP.

Subtask 10.2: Permitting

Upon completion of the 30% design package for the AML pier, Anchor QEA will work with KPFF and the MOS to develop a written project description that captures all elements of the AML pier replacement and associated North Berth Extension dredging, complete associated permit applications, develop supplemental regulatory materials, and develop required permit figures. Specifically, Anchor QEA will develop the following regulatory materials:

- USACE Rivers and Harbors Act Section 10 and Section 404 permit application package including:
 - Project description
 - USACE permit application
 - Permit figures
- Clean Water Act Section 401(b)(1) Alternatives Analysis
- Alaska Department of Environmental Conservation (ADEC) Request for Clean Water Act Section 401 Water Quality Certification (WQC) application including:
 - Project description
 - USACE permit application
 - Permit figures
 - Tier analysis of dredged material
 - Sampling results
 - Baseline water quality information
- Section 106 NHPA compliance memorandum
- Application for LOA under the MMPA
- ESA BA addressing Project considerations related to ESA-listed species and Magnuson-Stevens Fishery Conservation Act EFH

This task also includes time for coordinating with applicable agencies on regulatory considerations for the Project. Time is included for phone meetings with the USACE, NMFS, USFWS, ADEC, and MOS to address Project regulatory considerations. Anchor QEA will also submit and track the permit application materials through receipt of required permits and approvals.

Deliverables

- Draft and final SAP
- Health and Safety Plan
- Opinion of Probable Cost for Dredge Material Characterization Activities
- Draft and final USACE Rivers and Harbors Act Section 10 and Clean Water Act Section 404 permit application package
- Draft and final ADEC Clean Water Act Section 401 permit application package
- Draft and final NHPA compliance memorandum
- Draft and final MMPA LOA application
- Draft and final ESA BA and EFH assessment

Assumptions

- Dredged materials will not be evaluated or permitted for open-water disposal or in-water placement.
- Historical site information, including the original harbor as-builts, will be reviewed to assess the potential dredgeability of sediments within the Project footprint and to inform potential sampling methods. Historical site information may also help inform whether the proposed dredging area was native or fill materials.
- The SAP will receive two rounds of comments from the MOS and one round of comments from the USACE, EPA, and ADEC.
- Agency comments on the draft SAP will be addressed collectively in the final SAP.
- Only one round of Agency comments will need to be addressed prior to finalization of the SAP. If additional Agency comments are received after the SAP is finalized, a scope amendment will be prepared.
- All submittals will be electronic (as Word and/or PDF files).
- Meetings will be teleconferences; no in-person meetings are included in this task.
- No field sampling or testing costs are included.
- Anchor QEA will be the primary point of contact for applicable regulatory agencies.
- A mitigation plan will not need to be developed for the Project.
- NEPA requirements for the Project will be addressed internally by the USACE, and no NEPA documentation will need to be developed by Anchor QEA.
- No Section 408 resources will be impacted by the Project.
- The Project will not impact bald or golden eagles and therefore a take permit from USFWS will not be required.
- An NPDES Construction General Permit will not be required for the Project.
- The Project site is owned by the MOS, and therefore a DNR permit will not be required.
- KPFF will develop the building permit package for the Project. Anchor QEA will not need to provide any support to KPFF for development of the building permit package.

- KPFF will provide Anchor QEA with all design drawings for the Project in AutoCAD. Anchor QEA will create permit-ready figures from KPFF's design drawings.
- KPFF will provide supporting information for the LOA including pile sizes, installation measures, duration of pile driving, and other pertinent Project information.
- Anchor QEA will not develop a MMPA Plan of Cooperation under this Scope of Work.
- No local (MOS) or state (Alaska State Departments) permit or approvals will be required for the Project.
- Permits and approvals not specifically mentioned in this Scope of Work are not included and would be considered additional work, subject to negotiations.
- Due to the uncertainty associated with the regulatory agency review process, Anchor QEA cannot guarantee the outcome of the environmental permitting and ESA processes and whether the approvals required for the Project will ultimately be issued by the applicable regulatory agencies.
- For all permit deliverables, Anchor QEA will provide a draft deliverable, respond to a single, consolidated set of comments from the client, and finalize the deliverable.
- All draft deliverables to KPFF and the MOS will be provided in Word and PDF formats.
- Final deliverables for agency submittal will be provided in either PDF or printed as required by the agencies.
- Because the Project would likely require 2 years for construction, a LOA is expected to be the appropriate MMPA incidental take authorization.
- The AML pier that would be removed to accommodate the Project may be more than 50 years old and therefore must be assessed for eligibility under the NHPA.
- No fieldwork, laboratory testing, characterization results reporting, site visits, or in-person agency meetings are included in this Scope of Work.

Task 11: North Berth Extension Dredge Design

Anchor QEA will complete the dredge design of the North Berth Extension to meet navigation, safety, and permit volume requirements.

Subtask 11.1: 30% Design

Anchor QEA will complete 30% design documents, which are intended to support the permitting process (see Subtask 10.2). The 30% design will consist of coordination with KPFF to develop preliminary drawings that document the conceptual berth dredging extents, an outline of dredging-related technical specifications, a drawings list for dredging activities, and a Rough Order of Magnitude (ROM) Engineer's opinion of probable cost documenting estimated costs associated with the berth extension dredging and disposal and/or beneficial reuse of dredged materials. The 30% design will include a draft Basis of Design memorandum that documents key design criteria for the dredging and disposal design.

This Scope of Work assumes 12 half-hour weekly meetings (teleconferences) to coordinate with the Project design team (KPFF and Hart Crowser) for the duration of the 30% design phase.

Subtask 11.2: 90% Design

Anchor QEA will complete 90% design documents related to berth extension dredging, based on additional information and environmental, geotechnical, and structural design developments since the 30% design package. The 90% design will incorporate permit conditions into the specifications and drawings. Anchor QEA will also address one round of comments received from the MOS or other reviewers on the 30% design submittal. The 90% design will consist of coordination with KPFF to help refine the dredging-related design drawings, completion of technical specification sections for dredging-related activities, and a revised Engineer's opinion of probable costs. The 90% design will include a final Basis of Design memorandum that documents key design criteria for the dredging and disposal design.

This Scope of Work assumes 10 half-hour biweekly meetings (teleconferences) to coordinate with the Project design team (KPFF and Hart Crowser) for the duration of the 90% design phase.

Subtask 11.3: 100% Design

Anchor QEA will complete 100% design documents related to berth extension dredging, based on additional information and environmental, geotechnical, and structural design developments since the 90% design package. Anchor QEA will also address one round of comments received from the MOS or other reviewers on the 90% design submittal. The 100% design will consist of coordination with KPFF to help refine the dredging-related design drawings, completion of final technical specification sections related to dredging activities, and a final Engineer's opinion of probable costs. The 100% design submittal is intended to serve as bid-ready sections of the bid package that KPFF will assemble for the Project.

This Scope of Work assumes two half-hour biweekly meetings (teleconferences) to coordinate with the Project design team (KPFF and Hart Crowser) for the duration of the 100% design phase.

Deliverables

- 30% ROM, 90% revised, and 100% final Engineer's opinion of probable costs
- 30%, 90%, and 100% technical specification sections related to dredging activities

Assumptions

- KPFF is the CAD lead for all drawing development. Anchor QEA will provide dredge design criteria (e.g., allowable overdredge, sideslopes) to KPFF to develop the dredge prism, calculate dredge volumes, and develop design drawings through email and teleconferences. No time for Anchor QEA CAD design has been included in this Scope of Work.

- The two technical specification sections to be developed by Anchor QEA for dredge design will be Dredging and Environmental Controls. It is assumed that KPFF will complete the remaining technical specifications, and Anchor QEA would only provide minimal input, as needed, to any other applicable technical specification sections.
 - In the event that all or a portion of the dredge material is found to be suitable for beneficial reuse at the site based on dredge material characterization (Subtask 10.1), an additional two technical specification sections related to material offloading/segregation/handling and beneficial reuse design requirements may be needed and a Scope of Work amendment will be required.
 - Specifications will be developed using the Standard Specifications in CSI format.
 - Specification submittals will be electronic (as Word and/or PDF files).
- Development of the dredge prism includes coordination with Hart Crowser on geotechnical slope considerations. Hart Crowser will determine required slopes and assess associated stability for all slopes associated with the berth. Hart Crowser will provide geotechnical evaluation support at 30%, 90%, and 100% designs.
- Geotechnical design criteria (e.g., stable slopes during construction and long term) and any required static slope stability and/or seismic analysis will be conducted by other design team members.
- Coastal engineering design criteria for shoreline armoring (wave analysis, slope protection sizing) will be performed by other design team members; dredging-related specifications and drawings will not include the shoreline protection specifications and drawings.
- The proposed dredge area is assumed to not be contaminated in the subsurface to the extent that would require placing an engineered cap for remediation purposes. This scope assumes no evaluation or design of an engineered cap is needed.
- For budgeting purposes for Task 11, weekly or biweekly meetings (teleconferences) are assumed with the Project design team (KPFF and Hart Crowser) for the duration of each phase of design, as noted previously.

Budget

Project costs are summarized in Table 1. A detailed estimate of Anchor QEA costs is provided in Appendix A. Anchor QEA will routinely review its budget and inform KPFF of any anticipated scope and budget adjustments.

Table 1
Project Budget

Task	Description	Estimated Hours	Total Estimated Budget
1	Project Management and Design Coordination	195	\$43,650
4	Ore Peninsula Project Permitting	409	\$84,306
10	North Berth Extension Dredge Material Characterization and Permitting	676	\$137,484
11	North Berth Extension Dredge Design	328	\$62,636
Total		1,608	\$328,076

Anchor QEA proposes to perform this Scope of Work on a time-and-materials basis. Anchor QEA's 2022 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 of \$328,076 without prior authorization by KPFF.

ACCEPTED BY:

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

Date

Bob Riley, P.E.
Principal
KPFF

Date

Appendix A
Detailed Budget

Skagway Ore Peninsula Development

Task	Description	Hours by Labor Categories (hourly rates shown in parentheses)												Total Labor Hours	Total Labor Cost	Reimbursable Direct Costs	Total Reimbursable Costs	Total Direct Costs	Total Cost
		Principal (\$292)	Senior Manager (\$256)	Manager (\$239)	Senior Staff (\$212)	Staff 3 (\$186)	Staff 2 (\$167)	Staff 1 (\$141)	Senior CAD Designer (\$147)	CAD Designer (\$123)	Senior Technical Editor (\$145)	Technical Editor (\$123)	Senior Project Coordinator (\$139)						
Task1	Task 1 - Project Management and Design Coordination																		
1.1	Task 1. PM and Design Coordination	30.00	15.00	102.00	-	-	-	-	-	-	-	-	48.00	195.00	\$ 43,650	\$ -	\$ -	\$ -	\$ 43,650
Task4	Task 4 - Ore Peninsula Project Permitting																		
4.1	Task 4. Ore Peninsula Project Permitting	51.00	-	24.00	244.00	-	-	-	-	50.00	40.00	-	-	409.00	\$ 84,306	\$ -	\$ -	\$ -	\$ 84,306
Task10	Task 10 - North Berth Extension Dredge Material Characterization and Permitting																		
10.1	Task 10.1 - Agency Coord, SAP & Cost Development	30.00	50.00	62.00	36.00	40.00	50.00	60.00	12.00	-	10.00	16.00	-	366.00	\$ 73,442	\$ 320	\$ 320	\$ 320	\$ 73,762
10.2	Task 10.2 - Permitting	36.00	-	-	200.00	-	-	-	40.00	-	34.00	-	-	310.00	\$ 63,722	\$ -	\$ -	\$ -	\$ 63,722
Task11	Task 11 - North Berth Extension Dredge Design																		
11.1	Task 11.1 - 30% Design	4.00	10.00	30.00	-	24.00	-	32.00	-	-	6.00	-	-	106.00	\$ 20,744	\$ -	\$ -	\$ -	\$ 20,744
11.2	Task 11.2 - 90% Design	6.00	14.00	34.00	-	36.00	-	44.00	-	-	20.00	-	-	154.00	\$ 29,262	\$ -	\$ -	\$ -	\$ 29,262
11.3	Task 11.3 - 100% Design	2.00	6.00	14.00	-	14.00	-	20.00	-	-	12.00	-	-	68.00	\$ 12,630	\$ -	\$ -	\$ -	\$ 12,630
	Total Hours	159.00	95.00	266.00	480.00	114.00	50.00	156.00	52.00	50.00	122.00	16.00	48.00	1608					
	Total Cost	\$46,428	\$24,320	\$63,574	\$101,760	\$21,204	\$8,350	\$21,996	\$7,644	\$6,150	\$17,690	\$1,968	\$6,672		\$327,756	\$320	\$320	\$320	\$328,076

Appendix B

2022 Billing Rates

Anchor QEA, LLC

2022 BILLING RATES

Professional Level Hourly Rates

Principal CM ¹ /Engineer/LA ² /Planner/Scientist	\$292
Senior Managing Analyst/CM/Engineer/LA/Planner/Scientist	\$256
Managing Analyst/CM/Engineer/LA/Planner/Scientist	\$239
Senior Analyst/CM/Engineer/LA/Planner/Scientist	\$212
Staff 3 Analyst/CM/Engineer/LA/Planner/Scientist.....	\$186
Staff 2 Analyst/CM/Engineer/LA/Planner/Scientist.....	\$167
Staff 1 Analyst/CM/Engineer/LA/Planner/Scientist.....	\$141
Senior CAD ³ Designer.....	\$147
CAD Designer.....	\$123
Technician	\$119
Senior Technical Editor.....	\$145
Technical Editor.....	\$123
Senior Project Coordinator.....	\$139
Project Coordinator	\$114

Special Hourly Rates

National expert consultant.....	\$474
All work by a testifying expert.....	1.5 times professional level rate
Expert Advisor.....	\$364

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 CM: Construction Manager

² LA: Landscape Architect

³ CAD: Computer Aided Design



Phase										
	1									
#803 - Topographic Survey	Principal PLS	Senior PLS	Land Surveyor Party Chief*	Land Surveyor, LSIT*	Two-Person Crew	Admin Staff	Hourly Subtotal	Cost		
Billing Rate	\$250.00	\$195.00	\$125.00	\$110.00	\$230.00	\$85.00				
Task							0	\$0.00		
Project Setup / Research	1					1	2	\$335.00		
Compile existing data / control research				2			2	\$220.00		
Mobe / travel / on-site logisitcs					6		6	\$1,380.00		
Control recovery				1	2		3	\$570.00		
Topographic survey				1	8		9	\$1,950.00		
Utility locates and coordination				4	2		6	\$900.00		
Data reduction				2			2	\$220.00		
Surface model / survey drafting				6			6	\$660.00		
Survey sheets		1		8			9	\$1,075.00		
Project Management / QA/QC	1	4					5	\$1,030.00		
							0	\$0.00		
							0	\$0.00		
							0	\$0.00		
							0	\$0.00		
							0	\$0.00		
							0	\$0.00		
							0	\$0.00		
							0	\$0.00		
							0	\$0.00		
							0	\$0.00		
Hourly Subtotal	2	5	0	24	18	1	50			
Cost	\$500.00	\$975.00	\$0.00	\$2,640.00	\$4,140.00	\$85.00		\$8,340.00		



Phase	1
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#803 - Topographic Survey

Billing Rate	Unit	Unit Cost	Survey	Qty	Cost
Copies/Prints/Scans (Letter)	ea	\$0.10		0	\$0.00
Copies/Prints/Scans (11x17)	ea	\$0.20		0	\$0.00
Copies/Prints/Scans (Full Size)	ea	\$1.00		0	\$0.00
Teleconference Costing	hr/line	\$3.00		0	\$0.00
Airfare	ea	\$715.00	2	2	\$1,430.00
Vehicle rental	day	\$175.00	2	2	\$350.00
Survey GPS Rental	day	\$309.00	2	2	\$618.00
Shipping	ea	\$25.00		0	\$0.00
Parking	day	\$16.00		0	\$0.00
Hotel	day	\$250.00	2	2	\$500.00
Mileage	mile	\$0.585		0	\$0.00
Per Diem	man day	\$118.00	4	4	\$472.00
Cost			\$3,370.00		\$3,370.00



HUGHES & ASSOCIATES INC.

HYDROGRAPHERS - SURVEYORS

March 31, 2022

Municipality of Skagway
700 Spring Street
Skagway, AK 99840

Ref: Ore Dock/Cruise Terminal Survey
Multibeam Survey
Skagway, Alaska

Dear Mr. DeBroeck,

Hughes & Associates is hereby submitting their revised cost proposal to provide the multibeam survey for the Municipality of Skagway of the ore dock and cruise terminal.

Skagway Ore Dock and Cruise Terminal Survey	
Mobilization/De-Mobilization	\$ 0.00
Multibeam Data Collection	\$ 4,500.00
Data Processing	<u>\$ 3,000.00</u>
Total	\$ 7,500.00

The above estimate encompasses all aspects of the required multibeam survey including mobilization, data collection, data processing, and deliverables

If you have any questions, please contact me at (907) 355-5532.

Sincerely

Cory Hughes, PLS, CH
Project Manager



March 30, 2022
Project No. M0964.09.001

Ed DeBroeck
KPFf Consulting Engineers
1601 Fifth Avenue, Suite 1300
Seattle, WA 98101

Re: Skagway Ore Terminal Hazardous Building Materials Inspection and Support

Dear Mr. DeBroeck:

Maul Foster & Alongi, Inc. (MFA) has prepared this scope of work and cost estimate to conduct a hazardous building material (HBM) survey of the Skagway Ore Terminal (SOT) crane and associated conveyor system located in Skagway, Alaska (the Site).

SCOPE OF WORK

Task 1—HBM Assessment

MFA will provide accredited building inspectors, consistent with the Asbestos Hazard Emergency Response Act to collect bulk building materials samples in compliance with the Toxic Substance Control Act Title II/40 Code of Federal Regulations (CFR) 763. MFA will perform the work indicated below:

- Conduct an HBM (asbestos, lead paint coatings, and polychlorinated biphenyl (PCB) paint coatings) assessment of the SOT crane and associated conveyor system to document the condition, type, and amount of HBMs that may be present.
 - MFA will collect samples of materials suspected to be asbestos-containing materials (ACM).
 - MFA will assess painted surfaces at the Site with a portable x-ray fluorescence (XRF) device to understand the presence of lead-based paint. MFA will collect up to 5% of samples analyzed with the portable XRF and submit them to an analytical testing laboratory for quality assurance.
 - MFA will collect representative samples of potentially PCB-containing paint coatings.
- Conduct a visual assessment of other potentially hazardous materials (e.g., potentially PCBs-containing fixtures, mercury-containing switches, etc.).
- Track samples under standard chain of custody procedures and submit to a testing laboratory for analysis.

- ACM samples will be submitted to a testing laboratory compliant with the National Voluntary Laboratory Accreditation Program per 40 CFR 763 Subpart F, Appendix A for polarized light microscopy analysis by U.S. Environmental Protection Agency (EPA) Method 600/R-93-116.
- Quality assurance LBP samples will be analyzed by EPA Method 3050B/7420.
- PCB-paint samples will be analyzed by EPA Method 8082A.

Task 2—Reporting

MFA will prepare a report describing field sampling procedures and summarizing the laboratory results. The report will include information pertaining to the location of samples collected and amount and quality of building materials reported to contain more than 1% asbestos (if encountered) and/or detectable concentrations of lead and PCBs.

The report will be provided electronically via email. This report may be used to communicate abatement needs to a licensed abatement contractor.

Task 3—Bid Administration Support

MFA will assist in preparing/reviewing bid plans and specifications as it relates to abatement activities.

ASSUMPTIONS

In preparing the Scope of Work, MFA has reviewed the provided information and made necessary assumptions to define the services and fees. These assumptions are listed below:

- KPFF will provide MFA all relevant digital or hard copy data pertaining to the construction of the SOT crane and associated conveyors.
- KPFF will provide access to the SOT crane and associated conveyors including roof access where applicable for HBM sampling.
- The specific number of samples is unknown prior to implementation of the work. Based on prior experience and for budgeting purposes, we have assumed up to 100 ACM samples, up to 20 LBP chip samples, and up to 20 PCB paint chip samples will be submitted to the laboratory for analysis.
- Specifications prepared by MFA will reference applicable requirements, but the means and methods used to conduct abatement activities will be determined by the selected abatement contractor.
- In our experience, the level of support needed for Task 3 – Bid Administration Support can vary. For the purposes of this proposal, we have assumed a moderate degree of engagement, corresponding to 74 hours of MFA time.

- Hazardous materials that are not identified by the HBM assessment may be discovered during the demolition activities, which may warrant additional remediation and/or corrective actions.
- Samples will be submitted on a normal turnaround time basis.
- MFA will only require one trip to the Site in Skagway, Alaska and require no more than three days on site to complete the scope of work.
- Samples can be collected in a destructive manner.
- No repairs will be made to return materials to preexisting conditions.

EXCLUSIONS

The following services or products have been excluded from the scope of work. Many of these items can be provided at your request as a change to the scope of work and extra fee to be negotiated.

- Sampling of mechanical fluids for PCB analysis.
- Assessment of structures other than the crane and associated conveyors.
- Demolition/abatement oversight services.

BUDGET

The estimated cost to perform the proposed work is \$51,229 (see attached estimated budget). This cost estimate does not represent a lump sum. MFA bills for time and materials, consistent with the attached schedule of charges. MFA may apply money from one task to another to complete the scope of work.

SCHEDULE

Field work can be scheduled at a mutually agreeable time after receiving authorization to proceed. The survey is expected to require three days onsite. This proposal is valid for 30 days.

Sincerely,

Maul Foster & Alongi, Inc.



Ted Wall, PE
Vice-President

Ed DeBroeck
March 30, 2022
Page 4

Project No. M0964.09.001

Attachments: Estimated Budget
Schedule of Charges



Estimated Budget KPPF Skagway Ore Loader Assessment

Task	Maul Foster & Alongi, Inc.			Subcontractors	Total
	Hours	Labor	Direct		
1 Conduct HBM Survey	126	\$18,720	\$6,578	\$5,681	\$30,979
2 Reporting	56	\$7,870	\$0	\$0	\$7,870
3 Bid Administration Support	74	\$12,380	\$0	\$0	\$12,380
4 Task Title	0	\$0	\$0	\$0	\$0
5 Task Title	0	\$0	\$0	\$0	\$0
6 Task Title	0	\$0	\$0	\$0	\$0
7 Task Title	0	\$0	\$0	\$0	\$0
8 Task Title	0	\$0	\$0	\$0	\$0
9 Task Title	0	\$0	\$0	\$0	\$0
10 Task Title	0	\$0	\$0	\$0	\$0
11 Task Title	0	\$0	\$0	\$0	\$0
12 Task Title	0	\$0	\$0	\$0	\$0
Total Estimated Cost					\$51,229



SCHEDULE OF CHARGES

PERSONNEL CHARGES

Principal	\$220 – 230/hour
Senior.....	\$165 – 205/hour
Project.....	\$140 – 165/hour
Analyst	\$140 – 150/hour
Staff	\$125 – 140/hour
Graphic Design.....	\$120 – 130/hour
Technician	\$105 – 135/hour
Administrative Support.....	\$100 – 110/hour

Depositions and expert witness testimony, including preparation time, will be charged at 200 percent of the above rates.

Travel time will be charged in accordance with the above rates.

SUBCONTRACTORS

Charges for subcontractors will be billed at cost plus 15 percent.

EXPENSES

Charges for outside services, equipment, and facilities not furnished directly by Maul Foster & Alongj, Inc. will be billed at cost plus 10 percent. Such charges may include, but shall not be limited to the following:

Printing and photographic reproduction	Rented equipment
Rented vehicles/mileage	Shipping charges
Transportation on public carriers	Meals and lodging
Special fees, permits, insurance, etc.	Consumable materials

DIRECT CHARGES

Charges for specialized software modeling and equipment are as specified in the scope of work.

Field equipment rates are set forth in the Field Equipment Rate Schedule.

The rates for document production are set forth in the Document Production Rate Schedule.

RATE CHANGES

Schedule of Charges are subject to change without notice.



Glosten

21 March 2022
File No. P0152.21

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

Subject: Skagway Floating Dock Final Design

Dear Ed:

We appreciate the opportunity to support KPFF Consulting Engineers (KPFF) with the final design of the Skagway floating dock project. We are pleased to provide the following proposal for this work.

SCOPE OF WORK

Glosten will support the final design effort for the Skagway floating dock with hydrodynamic analysis and a review of the design drawings. The specific tasks Glosten will perform include:

1. Pile loads (500'x50' Transpac steel float, light draft)
2. Pile loads (500'x50' Transpac steel float, deep draft)
3. Float motions for the above configurations without cruise ship sheltering
4. Final hydrodynamic analysis report
5. Float manufacturer calculations and drawings review
6. Towing plan review
7. Bi-weekly meetings (April 2022 through September 2023)

The scope of review is uncertain at this time; therefore, we have included an allowance of 120 hours for review.

DELIVERABLES

Our project deliverables will include a short report documenting the pile loads and float motions gleaned from the hydrodynamic models. We will also deliver comments from our review tasks.

COST AND TERMS

We estimate that the engineering effort for performing these tasks will cost USD\$75,600. We will bill you monthly on a time-and-materials basis. We have included a breakdown of the costs in the table below and attached our fee schedule and standard terms and conditions of service.

Table 1 Cost Breakdown

Task	Description	Cost
1	Pile loads (500'x50' Transpac float, light)	\$7,800
2	Pile loads (500'x50' Transpac float, deep)	\$3,900
3	Float motions for above configurations	\$5,300

4	Hydrodynamic analysis report	\$7,600
5	Float manufacturer submittals review	\$22,800
6	Towing plan review	\$11,400
7	Bi-weekly meetings	\$16,800
<hr/>		
	Total	\$75,600

A significant portion of the work is expected to be performed in 2023. The proposed cost reflects 2022 billing rates per the attached fee schedule. Rates adjust January 1, 2023. We will invoice you at the rates in effect at the time service is provided. This proposal is valid for 30 days.

We have assumed that travel is not required. Should travel become necessary, travel expenses will be billed at cost.

SCHEDULE

We are prepared to start within two weeks of official notice to proceed. We understand that the notice to proceed is expected to be issued around April 8.

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 with this work.

Yours very truly,

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

JMM:mm

Enclosures: 1. 2022 Fee Schedule and Standard Terms & Conditions of Service

cc: Bob Riley, KPFF

PROPOSAL TITLE: Skagway Floating Dock Final Design

Glosten Proposal No. P0152.21

ACCEPTED BY KPFF Consulting Engineers

Signature and Date _____

Printed Name and Title _____



Glosten

2022 FEE SCHEDULE

Professional Staff	<i>Grade</i>	<i>Hourly Rate</i>
Principal	E9	\$290
Principal / Senior Marine Consultant	E8	\$285
Senior Engineer / Marine Consultant	E7	\$250
Senior Engineer / Marine Consultant	E6	\$215
Project Engineer / Marine Consultant	E5	\$195
Project Engineer / Marine Consultant	E4	\$180
Engineer	E3	\$165
Engineer	E2	\$155
Staff Engineer	E1	\$145
Engineering Intern	E0	\$ 90
Technical and Support Staff	<i>Grade</i>	<i>Hourly Rate</i>
Senior Engineering Technician	T5	\$170
Engineering Technician / Designer	T4	\$150
Engineering Technician / Designer / Technical Aide	T3	\$135
Engineering Technician / Designer / Technical Aide	T2	\$120
Engineering Technician / Designer / Technical Aide	T1	\$105
Administration	T0	\$ 90

LEGAL CONSULTING SERVICES

A rate of \$450 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 \$375 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.

Skagway Ore Peninsula Development

Task	Description	Hours by Labor Categories (hourly rates shown in parentheses)												Total Labor Hours	Total Labor Cost	Reimbursable Direct Costs	Total Reimbursable Costs	Total Direct Costs	Total Cost
		Principal (\$292)	Senior Manager (\$256)	Manager (\$239)	Senior Staff (\$212)	Staff 3 (\$186)	Staff 2 (\$167)	Staff 1 (\$141)	Senior CAD Designer (\$147)	CAD Designer (\$123)	Senior Technical Editor (\$145)	Technical Editor (\$123)	Senior Project Coordinator (\$139)						
Task1	Task 1 - Project Management and Design Coordination																		
1.1	Task 1. PM and Design Coordination	30.00	15.00	102.00	-	-	-	-	-	-	-	-	48.00	195.00	\$ 43,650	\$ -	\$ -	\$ -	\$ 43,650
Task4	Task 4 - Ore Peninsula Project Permitting																		
4.1	Task 4. Ore Peninsula Project Permitting	51.00	-	24.00	244.00	-	-	-	-	50.00	40.00	-	-	409.00	\$ 84,306	\$ -	\$ -	\$ -	\$ 84,306
Task10	Task 10 - North Berth Extension Dredge Material Characterization and Permitting																		
10.1	Task 10.1 - Agency Coord, SAP & Cost Development	30.00	50.00	62.00	36.00	40.00	50.00	60.00	12.00	-	10.00	16.00	-	366.00	\$ 73,442	\$ 320	\$ 320	\$ 320	\$ 73,762
10.2	Task 10.2 - Permitting	36.00	-	-	200.00	-	-	-	40.00	-	34.00	-	-	310.00	\$ 63,722	\$ -	\$ -	\$ -	\$ 63,722
Task11	Task 11 - North Berth Extension Dredge Design																		
11.1	Task 11.1 - 30% Design	4.00	10.00	30.00	-	24.00	-	32.00	-	-	6.00	-	-	106.00	\$ 20,744	\$ -	\$ -	\$ -	\$ 20,744
11.2	Task 11.2 - 90% Design	6.00	14.00	34.00	-	36.00	-	44.00	-	-	20.00	-	-	154.00	\$ 29,262	\$ -	\$ -	\$ -	\$ 29,262
11.3	Task 11.3 - 100% Design	2.00	6.00	14.00	-	14.00	-	20.00	-	-	12.00	-	-	68.00	\$ 12,630	\$ -	\$ -	\$ -	\$ 12,630
	Total Hours	159.00	95.00	266.00	480.00	114.00	50.00	156.00	52.00	50.00	122.00	16.00	48.00	1608					
	Total Cost	\$46,428	\$24,320	\$63,574	\$101,760	\$21,204	\$8,350	\$21,996	\$7,644	\$6,150	\$17,690	\$1,968	\$6,672		\$327,756	\$320	\$320	\$320	\$328,076



1601 5th Avenue, Suite 1300
 Seattle, Washington 98101
 p (206) 382-0600 f (206) 382-0500

Project:	Skagway Ore Peninsula Multi Use Dock & Industrial Transfer Bridge	Date:	3/25/2022
Location:	Skagway, Alaska	Sheet #:	1
Client:	Municipality of Skagway	Job #:	
By:	Jeff Bruce, PE	Version:	1

ATTACHMENT A - DRAFT Fee Estimate

	Senior Principal	Principal	Senior Project Manager	Senior Staff Engineer	Project Assistant	Sr. CAD Technician					Total
2021 Rates	\$ 290	\$ 255	\$ 185	\$ 140	\$ 100	\$ 125					
Task 1: Project Management and Design Coordination	37	68	92	0	12	0	0	0	0	0	\$ 46,290
Weekly Meetings (April to July: 15 weeks)	8	15	15								
Bi Weekly Meetings (July to April 2024: 48 total)	24	48	48								
Meetings with MOS (assume 5)	5	5	5								
Project Management			24		12						
Task 2: 30% Design	14	52	79	216	0	0	0	0	0	0	\$ 62,175
Review historical pile driving records	1	2	4	16							
Update slope stability and estimate slope displacement (2 case)	5	30	50	100							
Pile recommendations for steel float, new dolphins to the SW, new dolphin to the NE, and fuel header (Assume 3 offshore and 1 onshore profiles, 2 pile geometries each). Assume mostly repackaging.	5	5	15	40							
Dredging and slope stability recommendations at AML dock demo location	3	15	10	60							
Task 5: 60% Design	9	18	48	80	0	0	0	0	0	0	\$ 27,280
Review 60% plans and update recommendations as necessary	4	8	24	32							
Preliminary driveability analysis	1	2	4	8							
Analysis revisions for consistency with 60% plans	4	8	20	40							
Task 6: 90% Design & Building Permits	2	12	24	24	0	0	0	0	0	0	\$ 11,440
Review 90% plans and update recommendations as necessary	2	12	24	24							
Task 10: Deliverables	7	12	25	50	6	12	0	0	0	0	\$ 18,815
Draft Geotechnical Report	5	10	20	40	4	8					
Final Geotechnical Report	2	2	5	10	2	4					
Subtotal											\$ 166,000

Reimbursable Expenses

Reproduction	\$ -
Transportation	

Expenses Subtotal	\$ -
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Subconsultants

Coastal	
Survey	
Electrical	\$ -

Subconsultant Subtotal	\$ -	\$ -	\$ -
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TOTAL	\$ 166,000
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Norton Corrosion Limited, LLC

8820 222nd Street SE, Woodinville, WA 98077
Phone (425) 483-1616 • Fax (425) 485-1754
Email: pgoodwin@nortoncorrosion.com
www.nortoncorrosion.com

Since 1959
WBE certified by WBENC

March 24, 2022

Ed DeBroeck, P.E.
KPFF Engineers
1601 Fifth Avenue, Ste 1300
Seattle, WA 98101
Email: Ed.DeBroeck@kpff.com

O 206.382.0600
M 425.501.6968

Subject: **CATHODIC PROTECTION ENGINEERING
PENINSULA DOCK MISCELLANEOUS STRUCTURES
SKAGWAY, ALASKA**

Dear Ed:

Norton Corrosion Limited (NCL) is pleased to provide you this budget estimate for cathodic protection (CP) engineering and design on the above noted project. We are in receipt of your email dated March 21, 2022 with project information included and a link to your PowerPoint with alternates. We understand the following regarding our possible scope of work:

1. At this time the project involves a number of dock related structures with both new and existing submerged steel piles. In addition, a new large steel framed RORO ramp is being designed. NCL is to design a CP system to protect the submerged metal components.
2. A new float dock is being engineered and design by another firm. The firm will also be designing the CP system for submerged steel components. For this structure, KPFF would like NCL to review the designed CP system and provide recommendations. If CP design is needed for this structure at a later time, NCL would be happy to perform this work for an additional cost.
3. We understand that design drawings for this project will be used for public bid. NCL will provide bid ready CP plans and specifications.
4. At this time, we are uncertain of the design process. This budget assumes a 3-step submittal: 35%, 65% and Final. If there will be more or less steps, please advise and we will update the budget accordingly.

As part of the design, NCL included a predesign site visit (which could also be part of a kickoff meeting). The visit would be for a visual inspection of the project location/structures, review of surrounding area with particular attention to any possible stray current influences. NCL will also collect water samples.

5. As part of the submittals, NCL will provide CP system cost estimates.
6. Our budget assumes that there will be one bid package for all miscellaneous components of the project. If this is not the case, please advise on the structure of the project. We will update our estimate accordingly.
7. This budget is for CP engineering/design only. It does not include any coating design needs. It also does not include any post design work (during bid process of post design). Although NCL can provide this service.

Please consider the following:

Item	Quantity	Description - NCL's Approach to Project	Rate	Ext. Rate
Pre-Design Tasks				
1	4 hrs	Project Management/Project Work Plan/Cost Control	\$206.00	\$412.00



KPFF Skagway Peninsula Dock

March 24, 2022

Page 2

2	6	hrs	Review of Project Documents & Brief Pre-Design Phone Meeting	\$206.00	\$1,236.00
3	1	lot	Site Visit-Initial Investigation & Kickoff Meeting: NCL corrosion engineer to mod/demob to site and meet with project stakeholders, visually inspect site area, review for any stray current influences, test/collect samples and participate in Kickoff Meeting to discuss latest project information and solidify design focus guidelines. Cost indicated includes all travel expenses. We have budgeted for up to 6 hrs onsite.	\$7,129.00	\$7,129.00
Pre-Design Tasks-Estimated Budget					\$8,777.00
Design & Specifications 1st Submittal – 35%					
4	6	hrs	Prepare Basis of Design	\$206.00	\$1,236.00
5	6	hrs	Prepare Calculations	\$206.00	\$1,236.00
6	6	hrs	Prepare Cost Estimate	\$179.00	\$1,074.00
7	20	hrs	Prepare CP Specification	\$179.00	\$3,580.00
8	8	hrs	Prepare Supporting Design Drawings (by Engineer)	\$206.00	\$1,648.00
9	14	hrs	CAD Drawings	\$107.00	\$1,498.00
10	2	hrs	Secretarial Support	\$83.00	\$166.00
11	2	hrs	Principal Review	\$224.00	\$448.00
1st Submittal - Estimated Budget					\$10,886.00
Design & Specifications 2nd Submittal – 65%					
12	2	hrs	35% Submittal Revision Review, Phone Meeting & Follow up	\$206.00	\$412.00
13	2	hrs	Update Basis of Design	\$206.00	\$412.00
14	2	hrs	Update Calculations	\$206.00	\$412.00
15	2	hrs	Update the Cost Estimate	\$179.00	\$358.00
16	10	hrs	Update CP Specification	\$179.00	\$1,790.00
17	6	hrs	Update Supporting Design Drawings (by Engineer)	\$206.00	\$1,236.00
18	10	hrs	CAD Drawings	\$107.00	\$1,070.00
19	1	hrs	Secretarial Support	\$83.00	\$83.00
20	1	hrs	Principal Review	\$224.00	\$224.00
2nd Submittal - Estimated Budget					\$5,997.00
Design & Specifications 3rd Submittal – Final					
21	1	hrs	65% Submittal Revision Review, Phone Meeting & Follow up	\$206.00	\$206.00
22	1	hrs	Update Basis of Design	\$206.00	\$206.00
23	1	hrs	Update Calculations	\$206.00	\$206.00
24	1	hrs	Update the Cost Estimate	\$179.00	\$179.00
25	2	hrs	Finalize CP Specification	\$179.00	\$358.00
26	2	hrs	Finalize Supporting Design Drawings (by Engineer)	\$206.00	\$412.00
27	4	hrs	CAD Drawings	\$107.00	\$428.00
28	1	hrs	Secretarial Support	\$83.00	\$82.00
20	1	hrs	Principal Review of Final Submittal	\$224.00	\$224.00
3rd Submittal - Estimated Budget					\$2,301.00
30	6	hrs	Steel Float: CP designed by others and reviewed by NCL	\$206.00	\$1,236.00
31	6	hrs	Post Design Follow up phone calls & Meetings	\$206.00	\$1,236.00



Norton Corrosion Limited, LLC

KPFF Skagway Peninsula Dock
March 24, 2022
Page 3

Total Estimated Design Engineering Budget

\$30,413.00

Terms: Net 30 days on approved credit. Validity of proposal 90 days. NCL maintains \$3/5M professional liability insurance- higher limits are available at additional cost.

Thank you for the opportunity to present this proposal. We look forward to your positive response.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Philip Goodwin'.

Philip Goodwin
Technical Marketing

Authorized by Date

SC\PBC\Skagway_dock_KPFF

March 30, 2022

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

ATTN: Mr. Ed DeBroeck, P.E., DBIA
Associate

**RE: PROPOSAL FOR – Underwater Water Inspection & Corrosion Potential Survey
Ore Dock Dolphins, Skagway, Alaska**

Dear Mr. DeBroeck:

Further to your request, this letter is submitted as our proposal to carry out an underwater inspection and assessment, as well as a corrosion potential survey of the steel pipe piles that support the southernmost mooring and breasting dolphins associated with the Ore Dock in Skagway, Alaska.

Project Understanding

We understand that the existing Ore Dock in Skagway is to be repurposed and reconfigured to provide moorage for cruise ships. This effort will include demolition of the majority of the structure, however several of the newer, existing, dolphins will be utilized for the proposed structure. As part of the evaluation and design, inspection and assessment of the current condition of the steel pipe piling supporting these dolphins is required.

Based on the information you have provided, we understand that there are six (6) steel pipe pile supported dolphins that are anticipated to remain and that require underwater inspection. It appears that these dolphins were constructed in the early 2000s' and that they are approximately 20 years old. As far as we are aware, no previous underwater inspection of these piles has been carried out.

Although when comparing the ariel photo and the design drawings, the drawings do not reflect the exact configuration of the dolphins as they currently appear. We have assumed the following:

- There are six dolphins that are to remain, two mooring dolphins and four breasting dolphins.
- There are 22 bearing and batter piles supporting the six dolphins.
- The fender system on the four breasting dolphins consist of a removable upper fender unit with sleeve piles and two pin piles for a total of eight additional steel pipe piles.
- The depth ranges from approximately -40 ft. to -110 ft. MLLW.
- All piles are galvanized. No cathodic protection anodes have been installed on the dolphin piles.

The proposed inspection is to be carried out to assess the nature and extent of any corrosion or other in-service deterioration or damage to the various piles and fender units supporting the six dolphins.

Scope of Work

Field Investigation

The inspection will be conducted objectively and in a professional manner, with properly qualified personnel and in conformance with the usual standards of similar companies performing similar services under similar circumstances. Inspection of the piling will be conducted as a Routine Inspection, as outlined in the *ASCE Manuals and Reports on Engineering Practice No. 130 (MOP 130)*; **Waterfront Facilities Inspection and Assessment**. For this project the inspected members will be subjected to Level I, II and III inspection techniques.

The proposed inspection will provide for a two day onsite effort towards the investigation of the estimated 30 piles within the six dolphins. The members to be investigated in the two day effort include the bearing and batter piles, All inspected piles will receive Level I or modified Level I visual / tactile inspection dependent on depth, tidal levels, and underwater visibility. Due to the OSHA requirement for having a recompression chamber available for the deeper depths of over 100 ft. on the outer two or three dolphins and the bottom time limitations for dive inspector(s) at these depths, the piles within the outer dolphins will be inspected to a depth of 60 – 70 feet dependent upon specific site conditions during the field effort. The piles will be examined to identify corrosive section loss, impact or other significant damage to the steel members. Additionally, the piles will be examined to assess the integrity of the protective galvanized coating.

Approximately 10% of the inspected members will be subjected to Level II cleaning and detailed inspection to assess the galvanized coating and/or areas where the coating may have deteriorated. Approximately 5% of the inspected members will be subjected to Level III inspection techniques. This will include ultrasonic thickness testing of representative

piles at various elevations. Additionally the thickness of the galvanized coating will be measured on representative piles at several elevations above water using an Elkometer coating thickness gauge.

A corrosion potential survey will also be conducted at representative locations throughout the inspected dolphins to assess the effectiveness of the cathodic protection (i.e. galvanized coating). The survey will be accomplished using a reference half-cell to measure the electrical potential of the piles at varying elevations from the intertidal zone to the mudline.

Should time allow, a general swim through of the area beneath the conveyor system and the southern approach will be conducted to obtain a general opinion of the condition of these piles to provide information that may assist with removal and demolition of the piles in these areas.

Report

The inspection findings will be presented in a report which will include a narrative of the methodologies utilized, the observed conditions, a tabular listing of the inspection findings, a drawing providing the identification of the inspected members, as well as representative photographs illustrating damage or typical conditions encountered. No provision for the preparation of a draft report has been included. The report will be submitted electronically as a pdf file.

Schedule

We understand that the proposed work is to be conducted this spring / summer during scheduled cruise ship operations. As referenced above we have proposed a two day field inspection effort plus an additional two days for mobilization and demobilization of our crew from the Seattle area. Furthermore, because our dive equipment will need to be shipped by barge to Skagway, we will need approximately 3 weeks advance notice to accommodate shipping of the equipment. Given the water depths and seasonal weather conditions in Skagway, we have reviewed the tidal predictions for this spring / summer and determined the following periods provide for low daytime tides and are far enough advanced into the spring season, that the project should be feasible with minimal risk of weather delays.

- May 17 - 18; (Approx. -4' low tides)
- June 15 - 16; (Approx. -4' low tides)
- June 29- 30; (Approx. -1.5' low tides)

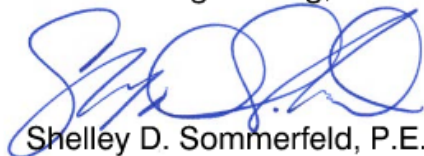
Should this timing not work for you or your client, we could investigate alternate dates for your consideration.

Fee

Our estimated not to exceed fee for the project is \$57,994 and is itemized on the accompanying spread sheet. This fee is based on our shipping our equipment and personnel to and from Skagway from our Lynnwood office.

We look forward to the possibility of assisting you with this proposed project. Should you have any questions regarding this proposal, if you require any additional information, or if our proposed level of effort does not meet with your anticipated requirements, please do not hesitate to contact our office.

Yours Truly,
Echelon Engineering, Inc.



Shelley D. Sommerfeld, P.E.
President

SDS/ebv
Enclosures





E CHELON ENGINEERING, INC.

Civil / Marine Consulting Engineers
Seattle, WA

FEE PROPOSAL For KPF Consulting Engineers Underwater Inspection Ore Dock Dolphins Skagway, Alaska

March 30, 2022

Scope Of Services -

Provide personnel and equipment to carry out a two day on-site effort to conduct underwater inspection of the steel pipe piles within six southern most dolphins associated with the Ore Dock in Skagway, AK. The project will also include a corrosion potential survey. The scope of the inspection will be as detailed in the associated letter. A written report along with representative photos, sketches and associated data for the structure will also be prepared and submitted.

PROJECT FEE

1. Labor: Field, Including Mob, De-Mob

P.E./Project Manager	46 hrs @	\$169.95 =	\$7,817.70
Technician IV - Field Supervisor	48 hrs @	\$120.51 =	\$5,784.48
Technician II - Inspector	52 hrs @	\$95.79 =	\$4,981.08
Technician II - Inspector	52 hrs @	\$80.34 =	<u>\$4,177.68</u>
Sub-Total Field Labor			\$22,760.94

2. Reimbursable Expenses

Airfare - Coach Fare + Luggage	4 ea @	\$1,500.00 =	\$6,000.00
Shipping - Equipment	2 ea @	\$6,500.00 =	\$13,000.00
Accommodations	3 dy @	\$1,000.00 =	\$3,000.00
Per Diem	4 dy @	\$464.00 =	\$1,856.00
Dive Support Boat	2 dy @	\$200.00 =	\$400.00
Launch / Moorage	3 dy @	\$25.00 =	\$75.00
Work Vehicle	4 dy @	\$130.00 =	\$520.00
SCUBA Dive System	2 dy @	\$65.00 =	\$130.00
Underwater Communication System	2 dy @	\$95.00 =	\$190.00
Air, (Dive Tanks)	2 dy @	\$90.00 =	\$180.00
Pneumatic cleaning equipment	2 dy @	\$100.00 =	\$200.00
UW Ultrasonic Thickness Gauge	2 dy @	\$110.00 =	\$220.00
Corrosion Potential Equipment	2 dy @	\$125.00 =	\$250.00
Underwater Camera System	2 dy @	\$65.00 =	\$130.00
Consumables & Supplies	2 dy @	\$50.00 =	\$100.00
Photo Processing	1 LS	=	\$120.00
Report Reproduction	1 LS	=	<u>\$25.00</u>
Sub-Total Expenses			\$26,396.00

3. Logistics, Administration & Reporting

Principal/Proj Manager PE	18 hrs @	\$169.95 =	\$3,059.10
Technician IV	24 hrs @	\$120.51 =	\$2,892.24
CAD Technician	10 hrs @	\$95.79 =	\$957.90
Word Processor/Tech II	24 hrs @	\$80.34 =	<u>\$1,928.16</u>
Sub-Total Reporting			\$8,837.40

PROPOSED FEE

\$57,994

This fee is valid for a period of 3 months