



March 7, 2019

PND No. 152017
File A3

Mr. Karl Hagerman
Utility Director
Petersburg Borough
PO Box 329
Petersburg, AK 99833

Re: Scow Bay 1 Pump Station Upgrade Project – Contract Amendment No. 1
Additional Engineering Services for Final Design, Bid Phase, Permitting and Construction Phase

Dear Mr. Hagerman,

PND Engineers, Inc. (PND) appreciates the opportunity to provide this fee proposal for additional engineering services on the Scow Bay 1 Pump Station Upgrade Project.

PND was contracted to provide engineering services for the project in 2015. The original intent of the project was to design and install a new pump station with controls hut. PND suspended design services following initial scoping and concept development efforts while PB attempted to negotiate property easements/acquisitions with adjacent owners. When efforts to acquire property outside of the right of way proved unsuccessful, you requested PND perform additional investigation and scoping services to develop alternatives for the pump station which allowed it to remain within the ADOT&PF ROW. From these efforts you have selected the full replacement alternative. Though the scope of services has evolved significantly, work to date has been performed under the original contract T&M fee estimate. Approximately \$25,000 remains of the original contract amount.

You requested PND provide this fee proposal to perform additional engineering services to complete the final design, and to perform bid phase assistance, permitting and construction phase engineering for the project. In light of the difference in scope and efforts performed to date, PND has developed this fee proposal such that fees to complete the proposed tasks are estimated without consideration of the original tasks and fees. The amount remaining in the current contract has been deducted from the new fee estimate to arrive at the proposed contract amendment amount of **\$68,611**, as detailed below. This proposal includes five tasks.

Tasks 1 & 2 – Design

Final design services will proceed with the selected Full Replacement Alternative and develop the design and contract documents. Design services will include one progress submittal and ultimately stamped bid ready documents. The anticipated individual design tasks are enumerated on the attached Time and Fee Breakdown Spreadsheets.

Task 1 - 90% Final Design Development

At the onset of the work, Rick Braun will perform necessary survey pickup work to obtain the approximate invert elevation and location of the discharge force main. PND and BCI will develop plans, specifications, and cost estimates to approximately 90% design completion for all project elements. This will require regular input and coordination between the design team and PB to satisfy the specific needs and objectives for the project. PND will maintain direct communication with PB at all times. AWWA, PB, ADEC, AKDOT and other relevant standards and regulatory requirements will be reviewed and the design accordingly developed to assure conformance. During this phase PND will perform a plans in hand site visit to review design for conflicts with existing conditions.

The submittal will include plans, technical specifications, construction schedule, bid schedule and cost estimates to reflect the 90% level of design completion. PND will incorporate the Petersburg Borough Standard Specifications as applicable and expand on them where necessary via special provisions. The 90% design documents will be presented to PB and following review, we will schedule a meeting to review comments.

Task 2 - Bid Ready Documents

PND will respond to the PB review comments on the 90% Design Review Submittal and will prepare bid ready documents including plans, special provisions to the Standard Specifications, supplemental technical specifications as required, bid documents, and a bid ready construction cost estimate with unit price bid schedule.

Tasks 1 & 2 Assumptions

1. Design will generally conform to the selected Full Replacement Alternative as defined in PND's Alternatives Analysis Submittal Package Dated July 30, 2018. Subsequent correspondence regarding design preferences will also be incorporated.
2. PND will perform no public involvement. PND will assist with temporary easements by developing general easement layout for PB discussions and execution with nearby property owners.
3. PB has provided limited geotechnical information from the test pit dug by PB near the site which will be utilized as appropriate. PND will not perform additional geotechnical evaluations for this project.

Tasks 1 & 2 Deliverables

1. 90% Design Review Submittal – plans, special provisions, technical specifications construction schedule and bid schedule.
2. Stamped bid ready documents in reproduction-ready hard copy and electronic PDF file formats.
3. Electronic Files: AutoCAD drawing files, MSWord technical specifications and special provisions.

Task 3 - Permitting

The project will include upgrades to the PB public sewer system. PND will develop the necessary design report, submit the application to ADEC and procure the Approval to Construct. Following Construction PND will obtain the Final Approval to Operate.

This project includes work within the AKDOT right of way and will require a utility permit. Additionally modifications to the AKDOT lighting circuit along Mitkof Highway will be required. Coordination with AKDOT has been included in this task.

Task 3 Assumptions:

1. PB will coordinate with AKDOT to remove the light pole(s) adjacent to the project. Poles will be removed by PMPL, stored for the duration of the project. And reinstalled by PMPL.

Task 3 Deliverables:

1. ADEC Approval to Construct and supporting documentation.
2. AKDOT Utility Permit

Task 4 – Bid Phase

We anticipate PB will distribute contract documents to prospective bidders. PND will assist during the bid advertising period as needed. Services will include responding to bidder questions and attending the pre-bid conference telephonically. PND will aid in preparing any supporting addenda documents that may result from bid phase interaction.

Task 4 Deliverables

Addenda Preparation Assistance – text and drawings as needed.

Task 5 - Construction Phase

PND will perform construction phase services as requested to support PB with contract administration. Anticipated engineering services during construction are as follows.

1. Preconstruction Conference: We will participate in the preconstruction conference telephonically to introduce our team to the contractor, address the roles of all parties, discuss Contractor work plans and schedules and generally assist in responding to questions and contract issues.
2. Submittal Reviews: PND will review submittals provided by the Contractor.

3. Pay Request Reviews: PND will review pay requests and provide Engineer pay request certifications to PB.
4. Information and Clarification Requests: Our team will respond to all Requests for Information (RFI's) and/or Design Clarification/Verification Requests (DC/VRs) promptly to avoid delays.
5. Substitutions and Modifications: We will assist the PB in evaluating any Contractor proposed substitutions, proposed design modifications and any value engineered alternatives presented during construction. We will prepare change order documentation and coordinate changes with PB and the Contractor.
6. Field Design Assistance: PND's engineering team will be available to provide design assistance during construction in the event that the PB desires to increase or decrease the scope of work or make a design change.
7. Construction Inspection Services: At PB request we will provide site inspections on a limited basis. Our inspectors will provide inspection reports describing all activities with narrative and electronic photos. The attached fee proposal assumes two trips for construction inspection for PND and BCI.

Schedule

PND understands the need for an aggressive schedule on this project in order to complete the work during this construction season. This will require timely coordination on all aspects of the project by all parties in order to maintain schedule. Work will be performed under the following schedule.

SCOW BAY 1 PUMP STATION UPGRADE PROJECT SCHEDULE		
PROJECT MILESTONE	BEGIN DATE	END DATE
Notice to Proceed		NLT March 11, 2019
Survey Pickups	March 11, 2019	March 15, 2019
Prepare and Submit Permit Documents	March 25, 2019	April 12, 2019
90% Design Submittal	March 11, 2016	April 15, 2019
PB Review of 90% Submittal	April 16, 2019	April 19, 2019
90% Design Review Meeting		April 19, 2019
Bid Ready Documents	April 22, 2019	May 6, 2019
Advertise and Open Bids	May 10, 2019	June 10, 2019
PB Council Bid Acceptance		June 17, 2019
Construction NTP		June 25, 2019
Construction, Substantial Completion	June 25, 2019	September 30, 2019

Fee Proposal

Attached please find a breakdown of the estimated time and fees for the described services. Our estimated costs for all tasks are as follows:

Cost Summary			
Task	Description	Cost	Fee Method
1	90% Design Development	\$33,203	T&M
2	Bid Ready Documents	\$19,450	T&M
3	Permitting	\$12,285	T&M
4	Bid Phase Services	\$4,171	T&M
5	Construction Phase Services	\$24,502	T&M
	Total Estimated Fee, Tasks 1-5	\$93,611	
	Remaining in Current Contract	(\$25,000)	
	Proposed Fee Increase	\$68,611	

PND proposes to perform the work on a T&M basis. We will invoice using our 2019 Standard Billing Rates.

Petersburg Borough, Scow Bay 1 Pump Station Upgrade
March 7, 2019

We appreciate the opportunity to provide these services to PB on this important project. We are available to commence immediately and look forward to working with you towards the successful completion of the Scow Bay 1 Pump Station Project.

Sincerely,

PND Engineers, Inc. | Juneau Office



Dick Somerville, P.E. | Vice President



Tyler Bradshaw, P.E. | Project Manager

Enclosures:

1. Time and Fee Breakdown Spreadsheets
2. BCI Proposal



PND Engineers, Inc.
Petersburg Scow Bay 1 Pump Station Upgrade
Contract Amendment 2
Engineering Services Fee Proposal
Design, Permitting, Bid and Construction Phases
PND Project No. 152017
March 7, 2019

Cost Summary			
Task	Description	Cost	Fee Method
1	90% Design Development	\$33,203	T&M
2	Bid Ready Documents	\$19,450	T&M
3	Permitting	\$12,285	T&M
4	Bid Phase Services	\$4,171	T&M
5	Construction Phase Services	\$24,502	T&M
Total		\$93,611	



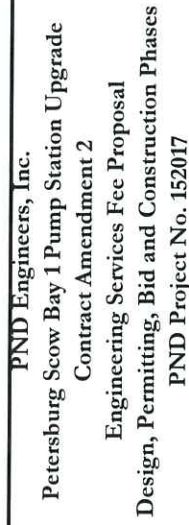
PND Engineers, Inc.
Petersburg Scow Bay 1 Pump Station Upgrade
Contract Amendment 2
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Design, Permitting, Bid and Construction Phases
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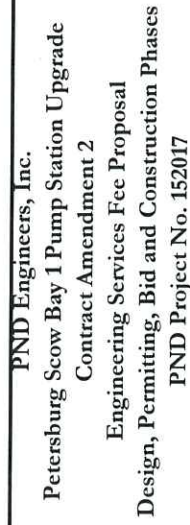
Task No.	Scope of Services	PND Senior Engineer VII	PND Senior Engineer VI	PND Senior Engineer III	PND Senior Engineer II	PND Senior Engineer I	PND Staff Engineer V	PND Tech VI	PND Tech V	PND CAD Designer VI	PND CAD Designer IV	Line Item Costs	Task Subtotal Costs
		\$195,00	\$180,00	\$140,00	\$130,00	\$120,00	\$115,00	\$130,00	\$115,00	\$115,00	\$90,00		

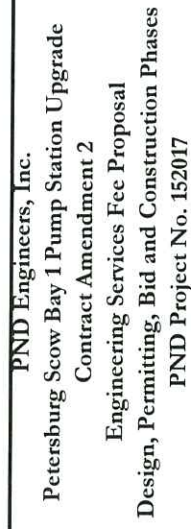
Task 1 - 90% Design Development

1.1	Project Management: Design team coordination, meetings, correspondence, scheduling, budget controls, invoicing, reports, contract management, clerical.	6											
1.2	Demolition, disposal and materials salvage plan				6		6		4			\$3,100	
1.3	Construction sequencing plan	1			6		2			8		\$1,700	
1.4	Pump design, and mfr. coordination				6					2		\$1,435	
1.5	Pump station operations and sequencing				6							\$780	
1.6	Layout and site plan	1			10		2			2		\$1,010	
1.7	Pipe and wells design details				6					12		\$3,105	
1.8	Research coatings, specifications and details	1			2		4			8		\$1,700	
1.9	Electrical design coordination	1			4		1			2		\$1,060	
1.10	Construction easement support documents	1			4		1			4		\$1,290	
1.11	Material quantities computations, bid schedule and cost estimate	1			8		2			4		\$1,925	
1.12	Special provisions and technical specifications	2			8		4					\$1,890	
1.13	Prepare Design Review Submittal				2					2		\$490	
1.14	Design Review Submittal Meeting (telephonic)	2			2		2					\$880	
1.15	Respond to review comments	1			4					2		\$945	
Total Estimated Man-hours		17	0	0	80	0	24	0	4	48	0		\$21,310

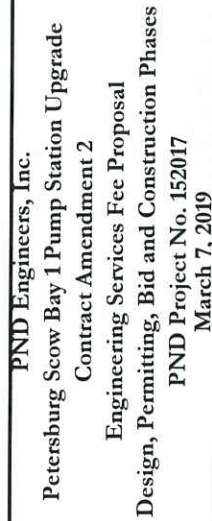
Estimated Third Party Expenses		Description	Quantity	Unit Cost	Line Item Costs
Consumables					
PND Travel		Airfare - Round Trip Ticket	1	\$350	\$350
PND Travel		Vehicle Rental - Days of Rental	2	\$100	\$200
PND Travel		Lodging - Nights	1	\$180	\$180
PND Travel		Per Diem	2	\$65	\$130
Misc.		Reproduction and Misc. Consumables	1.S	\$1,000	\$1,000
Sub-Contractor Expenses					
Boreal Controls Inc.		Electrical, Power and Controls	1.S	\$8,400	\$8,400
Rick Braun		Survey Pickups, (hours)	4	\$138	\$552
Administrative Fee		10% Markup on Third Party Expenses	1.S	\$1,081.20	\$1,081
TOTAL TIME AND MATERIALS ESTIMATE (T&M)					
					\$11,893
					\$33,203

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Task No.		Scope of Services										Line Item Costs	Task Subtotal Costs	
Task 4 - Bid Phase														
4.1	Project Management: Design team coordination, meetings, correspondence, scheduling, budget controls, invoicing, reports, contract management, clerical. Attend Prebid Conference Telephonically Address bidder questions and prepare addenda responses													
4.2		2			1	2			1			\$635		
4.3					2							\$500		
Total Estimated Man-hours		4	0	0	9	4	0	0	1	4	0	\$1,870	\$3,005	
Estimated Third Party Expenses		Description										Quantity	Unit Cost	Line Item Costs
Consumables														
Misc.		Reproduction and Misc. Consumables										I.S	\$500	\$500
Sub-Contractor Expenses														
Boreal Controls Inc.		Bid Phase Support										I.S	\$560	\$560
Administrative Fee		10% Markup on Third Party Expenses										I.S	\$106	\$106
TOTAL TIME AND MATERIALS ESTIMATE (T&M)													\$1,166	
													\$4,171	



Estimated Third Party Expenses		Description	Quantity	Unit Cost	Line Item Costs
Consumables					
PND Travel		Airfare - Round Trip Ticket	2	\$350	\$700
PND Travel		Vehicle Rental - Days of Rental	4	\$100	\$400
PND Travel		Lodging - Nights	2	\$180	\$360
PND Travel		Per Diem	4	\$65	\$260
Misc.		Reproduction and Misc. Consumables	1.S	\$500	\$500
Sub-Contractor Expenses					
Boreal Controls Inc.		Construction Phase Support	1.S	\$1,600	\$1,600
Administrative Fee		10% Markup on Third Party Expenses	1.S	\$382.00	\$382
TOTAL TIME AND MATERIALS ESTIMATE (T&M)					

**Petersburg Scow Bay 1 Lift Station
Cost Proposal for Electrical & Control Systems Engineering Services**

**Boreal Controls Inc.
3/6/2019**

Engineering Labor

Description	Staff	Hours	Hourly Rate	Total
90% Design Submittal				
Design - New 480V service, electrical site plan, power & signal, control panel, communications, equipment selection & layout, light circuit relocation, and specifications.	BCI Engineer	60	\$140	\$8,400
Total Task Labor			\$8,400	\$8,400
Bid Ready Documents				
Final design	BCI Engineer	30	\$140	\$4,200
Total Task Labor			\$4,200	\$4,200
Bid Phase Services				
Answer bidder questions	BCI Engineer	4	\$140	\$560
Total Task Labor			\$560	\$560
Construction Phase Services (CA/CI)				
Inspect Electrical Installation (on-site)	BCI Engineer	8	\$140	\$1,120
Travel	BCI Engineer	6	\$80	\$480
Total Task Labor			\$1,600	\$1,600

Expenses

Item	Quantity	Units	Unit Price	Total	Total
Travel					
Airfare - To Petersburg	1	Trips	\$450	\$450	
Per Diem	1	Days	\$250	\$250	
Car Rental	1	Days	\$75	\$75	
Total Task Expenses				\$775	\$775
		108			
		PROJECT TOTAL			\$15,535