May 11, 2023



Tyson Ames Municipality of Skagway, Public Works Director P.O. Box 415 Skagway, AK 99840 <u>t.ames@skagway.org</u>

#### RE: MOS Skagway River Levee Maintenance Repair Topographic Survey, Design, Permitting and Bid Services Fee Proposal

### DEAR TYSON,

RESPEC is pleased to submit this fee proposal for performing topographic mapping, engineering design and bid services for the maintenance repairs of sections of the Skagway River Levee that are the responsibility of the Municipality of Skagway (MOS) in Skagway, Alaska. The Army Corps of Engineers performed an inspection on the Skagway River Levee in May 2022 and a report was issued on October 4, 2022 identifying that erosion has occurred at the toe of the riverbed of the revetment. Respec has walked the levee with you in mid-April of this year to visually inspect the failed levee scope of work areas. Field measurements of the levee indicated an approximate length of 1,313 feet in length from the State of Alaska/MOS boundary to the Skagway River bridge. The following is our anticipated scope of work tasks for the Skagway River Levee repairs:

## **SCOPE OF WORK**

#### TASK 1 - Topographic Mapping

The first work task for this project is to obtain field topographic survey so that accurate mapping can be produced for engineering design and permitting needs. The topographic survey will begin at the border between State of Alaska Airport and MOS property and head north to the Skagway River Bridge a distance of approximately 1,313 feet. Features which will be surveyed include the existing gravel access road that parallels Alaska Street, existing top of river bank, spot elevations on the existing riprap slope, edge of water at the river, some water shots where feasible, survey in the failed riprap areas, survey in the west drainage area to facilitate a river diversion option, sand bar to the north near the Skagway River bridge, survey the Pat Moore Pedestrian bridge asphalt path, some uplands and surveying where a temporary access road would be developed to allow access to the river. Underground utilities are not known in this area. Horizontal and vertical control for construction will be established on or near the project site. Field survey data will be reduced and mapped at a 1"=10' scale for use in engineering design. All work will be prepared in AutoCAD R2023 in standard U.S. imperial units.



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

#### TASK 2 – Engineering Design (65%, 90% and Final Documents)

Respec principal civil engineer will travel to Skagway on May 23, 2023 to walk the project site with MOS and Army Corps of Engineers to further review the scope of



work for repairs to the Skagway River Levee. Using the topographic mapping produced in Task 1 Respec will develop 65% design drawings and technical specifications for the repair of the failed Skagway River Levee. The 65% design documents would include cover sheet, note sheet, individual plan view sheets of the project area, site cross sections of the levee showing repair areas, typical sections of the river levee reconstruction, construction details, temporary access road to the work zone, river diversion plan, erosion and sediment control plan, and traffic control plans. 65% design plans, technical specifications, quantity calculations and engineers cost estimate will be prepared and submitted to MOS for review. Respec engineer will travel to Skagway and perform a plans in hand walk-through in the field of the 65% design documents with MOS Public Works Director. A sheet by sheet review will also be performed with the MOS Public Works Director while in Skagway.

Corrections to the 65% design plans, specifications and cost estimate will be made by Respec and construction documents advanced to a 90% design level. 90% design drawings, technical specifications and construction cost estimate will be submitted in electronic format to MOS for review.

Final bid ready documents will be prepared by Respec incorporating all final MOS comments. The bid ready documents will include final signed construction drawings, final technical specifications, and final engineers cost estimate for the project. All documents will be coordinated with MOS for getting posted onto the MOS website for advertising for construction.

Submittals of plans, specifications and cost estimate will be made in 11x17 PDF format at the 65%, 90% and 100% design levels. Technical specifications will be created using CSI format and coordinated with MOS bidding boiler plate sections. It is assumed that there will be at least one project team meeting in each design phase of the project, 3 total. All printing and advertising of project will be done by MOS.

#### TASK 3 – Permitting

Agency permits anticipated for the Skagway River Levee reconstruction include the U.S. Army Corps of Engineers 401/404 permit and the State of Alaska Department of Fish and Game Habitat Permit. The Skagway River is an anadromous water body that has been identified as an important spawning, rearing and migration of anadromous fish species.

## TASK 4 – Bid Services

Respec will respond to contractors questions submitted to MOS that arise during the bid period. We will attend the pre-bid conference in person in Skagway and prepare the pre-bid meeting agenda and prepare pre-bid meeting minutes. We will prepare any addenda as required during the advertising period for the civil engineering design. Respec will prepare a bid evaluation summary letter for MOS after the bids are opened for MOS to use in issuing a notice of intent to award.



# **ESTIMATE OF FEES**

MOS SKAGWAY RIVER LEVEE REPAIR WORK TASKS	ESTIMATED FEE
Topographic Mapping	\$19,474
Engineering Design/Specs (65%, 90% and Final Bid Ready)	\$53,365
Agency Permitting	\$13,560
Bid Services	\$7,115
ESTIMATED TIME AND MATERIALS FEE TOTAL	\$93,514

We propose to perform our work on a time and expense basis. Respec's total compensation for services provided pursuant to this agreement, including labor and overhead costs and expenses shall not exceed \$93,514 without written authorization by MOS.

Attached herewith is a fee spreadsheet as backup for the Skagway River Levee Maintenance Repair services as described herein. Additional professional services work that is requested or added to the contract will be billed on a separate time and materials basis or negotiated separately. Respec will keep you apprised of budget and scope status throughout the performance of this work and alert you of any non-scope items that may impact the budget.

**Fee exclusions:** No geotechnical investigation fee is included in this fee proposal. Construction Administration and field inspection services fee proposal will be submitted once a contractor has been selected for the project as contractor schedule and hours of operation not known at this time.

#### SCHEDULE

Task 1 Topographic Mapping is the first item of work that would be accomplished and we are available to begin that work within 1 week of a Notice to Proceed. The sooner that we can get the mapping completed the better as the water levels in the river will soon begin to rise making field survey work challenging to complete. Once the mapping is finalized we anticipate 3 weeks to produce the 65% design submittal package.

We appreciate the opportunity to be of service to MOS on this important community project and look forward to working with you. Should you have any questions, please do not hesitate to contact me at your convenience.

Sincerely, pisid mark J. Mark Pusich, PE Principal Civil Engineer

Principal Civil Engineer Mark.Pusich@respec.com 907-780-6060

Approved By:

COST ESTIMATE	PER TASK
	MOO OKA OWAY DI

FIRM:	RESPEC				PROJECT TITLE: MOS SKAGWAY RIVER LEVEE RECONSTRUCTION								
TASK No:	1	TASK DESCRIPTION:		SKAGWAY RIV	/ER LEVEE TO	DPOGRAPHIC	MAPPING					DATE:	5-10-23
GROUP:		METHOD OF PAYMENT	:	FP 🗸	FPPE	T&E	CPFF		PREPARE	D BY:	JMP		
SUB-						LA	BOR HOURS	S PER JOB CLASSIFICATION					
TASK No.	SUB-T	ASK DESCRIPTION	Project	Civil Engr.	AutoCAD	Civil Engr.	2 Man						
	000-17		Manager	Associate	Draftsman	EIT	Survey						
			(Pusich)	(Puustinen)	(Kemp)		Crew						
1	Job Setup/Re	eview Records		2		2							
2	Field Survey	Team/Mob/Survey					44						
	Reduce Map				32								
		check Mapping		2	4								
5	RESPEC QC	/Management	2										
											4		
											1		
TOTAL HO			2	4	36	2	44						
	ATES (\$/HR)		\$250.00	\$190.00	\$125.00	\$125.00	\$230.00						
LABOR CO	STS (\$)		\$500.00	\$760.00	\$4,500.00	\$250.00	\$10,120.00						
	-		EXPENSES		-		-	COMMEN	NTS:				
SUB- TASK No.		ITEM(S)			QUANTITY	UNIT PRICE	TOTAL PRICE	Field sur	vey of Ska	gway Rive	r from DOT	to Pat Moc	ore
1	Air Fare June	au/Skagway			2	\$575.00	\$1,150.00	bridge,					
	Lodging in SI				6	\$150.00	\$900.00	1					
	Per Diem Ska				8	\$118.00	\$944.00	1					
		s Extra Luggage			1	\$250.00	\$250.00	1					
	Airport Parkir				4	\$25.00	\$230.00	1					
5		יש איז			+	φ20.00		FIRM'S TOT	AL COST OF L	ABOR (or F	ixed Price).		\$16,130
							TAL INDIREC			0.00%	\$10,130 \$0		
					TOTAL		¢0.044			-		0.00%	
						EXPENSES:	\$3,344		AL EXPENSES				\$3,344
		SUB-CONTRACTORS:	rrm Initials a	na Price Per Ta	ASK	1		FIRM'S TOTAL COST (no Subcontracts or Fee)					\$19,474
FIRM:													
AMOUNT:								TOTAL SUB	CONTRACTOR	R PRICES:			\$0

	COST ESTIMATE PER TASK												
FIRM:	RESPEC				PROJEC	T TITLE:	MOS SKAGV	VAY RIVER L	EVEE RECON	STRUCTION	l		
TASK No:	2	TASK DESCRIPTION:		SKAGWAY RI	VER LEVEEE	65% DESIGN						DATE:	5/10/2023
GROUP:		METHOD OF PAYMENT	:	FP 🗸	FPPE	T&E	CPFF		PREPARE	D BY:	JMP		
SUB-						LABOR HOURS PER JOB CLASSIFICATION							
TASK No.	SUB-T	SUB-TASK DESCRIPTION		Civil Engr. Associate (Puustinen)	AutoCAD Draftsman (Kemp)	Civil Engr. EIT							
1	Cover Sheet				1								
2		iation/symbols			2								
3	Survey Control Map				2								
4		of River Levee		8	8								
5		ections of River Levee		8	8								
6	Typical Secti	ions of Levee		6	6								
7	Construction	Details		6	6								
8	Estimate of 0	Quantities		4	4	8							
9	Cost Estimat	te	2	4									
10	Technical Sp	pecifications		6		6							
11		nd Field Review	10										
12		agway for COE Meeting	10										
12	RESPEC QC	C/Management	6										
											-		
TOTAL HO			00	40	07	11							
	ATES (\$/HR)		28 \$250.00	42 \$190.00	37 \$125.00	14 \$125.00							
LABOR CO													
	313 (\$)		\$7,000.00	\$7,980.00	\$4,625.00	\$1,750.00							
SUB- TASK No.		ITEM(S)	EXPENSES		QUANTITY	UNIT PRICE	TOTAL PRICE		NTS: ign plans, s o Skagway fo	-	ons and cos	t estimate.	
1	Air Fare June	eau/Skagway			2	\$575.00	\$1,150.00						
2	Airport Parki	ng			2	\$20.00	\$40.00	Travel to	Skagway f	or COE m	eeting in Ma	ay	
									ulia madali	na			
									ulic modeli	ing			
									AL COST OF L		iivad Briaa):		¢04.255
									TAL INDIREC		ixeu Frice):	0.000/	\$21,355
						<b>I</b>				_		0.00%	
					L EXPENSES:	\$1,190		AL EXPENSES				\$1,190	
		SUB-CONTRACTORS: I	nd Price Per Ta	ask			FIRM'S TOT	AL COST (no S	Subcontract	s or Fee)		\$22,545	
FIRM:													
AMOUNT:								TOTAL SUB	CONTRACTOR	R PRICES:			\$0

					COST	ESTIMATE PI	ER TASK						
FIRM:	RESPEC				PROJEC	T TITLE:	MOS SKAGV	VAY RIVER L	EVEE RECONS	STRUCTION	1		
TASK No:	3	TASK DESCRIPTION:		SKAGWAY RIV	VER LEVEEE	90% DESIGN						DATE:	5/10/2023
GROUP:		METHOD OF PAYMENT	:	FP 🗸	FPPE	T&E	CPFF		PREPARE	D BY:	JMP		
SUB-						LABOR HOURS PER JOB CLASSIFICATION							
TASK No.	SUB-T	ASK DESCRIPTION	Project Manager (Pusich)	Civil Engr. Associate (Puustinen)	AutoCAD Draftsman (Kemp)	Civil Engr. EIT							
1	Cover Sheet				1								
2					2								
3	Note abbreviation/symbols Survey Control Map				2	1					1		
4		of River Levee		8	8								
5	Site Cross S	ections of River Levee		8	8	1					1		
6	Typical Sect	ons of Levee		6	6								
7	Construction	Details		6	6								
8	Estimate of 0			4	4	8							
9	Cost Estimat		2	4									
10	Technical Sp		-	6		6							
11	RESPEC QC	C/Management	6										
			-										
TOTAL HO			8	42	37	14					_		
	ATES (\$/HR)		\$250.00	\$190.00	\$125.00								
LABOR CO	515 (\$)		\$2,000.00	\$7,980.00	\$4,625.00	\$1,750.00							
SUB- TASK No.		ITEM(S)	EXPENSES		QUANTITY	UNIT PRICE	TOTAL PRICE	COMMEN 90% desi	ITS: gn plans, s	pecficatio	ons and cos	t estimate.	
								<b>!</b>					
								]					
								FIRM'S TOTAL COST OF LABOR (or Fixed Price):					\$16,355
								IF CPFF, TO	TAL INDIRECT	COST @		0.00%	\$0
					TOTA	EXPENSES:	\$0	FIRM'S TOT	AL EXPENSES				\$0
		SUB-CONTRACTORS: I	Firm Initials a	nd Price Per Ta	ask			FIRM'S TOT	AL COST (no S	ubcontract	ts or Fee)		\$16,355
FIRM:													
AMOUNT:								TOTAL SUB	CONTRACTOR	PRICES:			\$0

					COST	ESTIMATE PI							
FIRM:													
TASK No:	4	TASK DESCRIPTION:		SKAGWAY RI	VER LEVEEE	90% DESIGN						DATE:	5/10/2023
GROUP:		METHOD OF PAYMENT	:	FP 🗸	FPPE	T&E	CPFF		PREPAREI	D BY:	JMP		
SUB-					LABOR HOURS PER JOB CLASSIFICATION								
TASK No.	SUB-T	ASK DESCRIPTION	Project Manager (Pusich)	Civil Engr. Associate (Puustinen)	AutoCAD Draftsman (Kemp)	Civil Engr. EIT							
1	Cover Sheet				1								
2		ation/symbols			1								
3	Survey Cont				1								
4		of River Levee		4	4				1				
5		ections of River Levee		4	4								
6		ons of Levee		4	4								
7	Construction	Details		4	4								
8	Estimate of 0	Quantities		4	4	8							
9	Cost Estimat	e	2	4									
10	Technical Sp			6		6							
11		ansmit Bid Documents		6	4	4							
12	RESPEC QC	C/Management	6										
						-			<u> </u>				
	1												
									1				
TOTAL HO	URS		8	36	27	18							
* LABOR R	ATES (\$/HR)		\$250.00	\$190.00	\$125.00	\$125.00							
LABOR CO	)STS (\$)		\$2,000.00	\$6,840.00	\$3,375.00	\$2,250.00							
			EXPENSES	-		-	-	COMMEN			-	-	
SUB- TASK No.		ITEM(S)			QUANTITY	UNIT PRICE	TOTAL PRICE	100% des	sign plans, s	specficat	ions and co	st estimate	).
								<b>!</b>					
									AL COST OF L		ixed Price):		\$14,465
								IF CPFF, TO	TAL INDIRECT	COST @		0.00%	\$0
					ΤΟΤΑΙ	EXPENSES:	\$0	FIRM'S TOT	AL EXPENSES				\$0
		SUB-CONTRACTORS: F	nd Price Per Ta					AL COST (no S		s or Fee)		\$14,465	
FIRM:									· ·		,		
AMOUNT:				1				TOTAL SUB	CONTRACTOR	PRICES:			\$0

						ESTIMATE P							
FIRM:	RESPEC PROJECT TITLE: MOS SKAGWAY RIVER LEVEE RECONSTRUCTION   5 TASK DESCRIPTION: SKAGWAY RIVER LEVEE AGENCY PERMITTING DATE: 5/												
TASK No:	5	TASK DESCRIPTION:		SKAGWAY RIVER LEVEE AGENCY PERMITTING									5/10/2023
GROUP:		METHOD OF PAYMENT	Γ:	FP 🗸	FPPE	T&E	CPFF		PREPARE	D BY:	JMP		
SUB-		•				LA	BOR HOURS	PER JOB CL	ASSIFICATION	l			
TASK No.	SUB-TASK DESCRIPTION		Project Manager (Pusich)	Civil Engr. Associate (Puustinen)	AutoCAD Draftsman (Kemp)	Civil Engr. EIT							
1	Army Corps	of Engineer Permit		12	24	8							
2		Fish and Game		12	24	8					-		
3	Respec QC		4										
4													
5													
6													
7													
8													
9													
10													
11 12													
12													
			-										
TOTAL HO			4	24	48	16						_	
	RATES (\$/HR	)	\$250.00	\$190.00	\$125.00	\$125.00					_	-	
LABOR CO	DSTS (\$)		\$1,000.00	\$4,560.00	\$6,000.00	\$2,000.00							
			EXPENSES		1			COMME	NTS:				
SUB- TASK No.		ITEM(S	)		QUANTITY	UNIT PRICE	TOTAL PRICE	Army Co	orps of Engi	neers Pe	ermit		
								State of	AK Fish adn	Game I	Permit		
								FIRM'S TOTAL COST OF LABOR (or Fixed Price):					\$13,560
								OTAL INDIRECT		,	0.00%	\$0	
	1				ΤΟΤΑ	L EXPENSES:	\$0		AL EXPENSES	-			\$0
		SUB-CONTRACTORS:	Firm Initials a	and Price Per T			ŶŬ		AL COST (no S		cts or Fee)		\$13,560
FIRM								111110101		abcontrat			ψ10,000
								TOTAL SUP		DDICES.			\$0
	TOTAL SUBCONTRACTOR PRICES:							<b>پ</b> ک					

					COST	ESTIMATE P	ER TASK					
FIRM:	RESPEC				PROJE	CT TITLE:	MOS SKAG	WAY RIVER L	EVEE RECONSTRUCTI	ON		
TASK No:	6	TASK DESCRIPTION:		MAIN STREET	PUBLIC INVO	DLVEMENT				DATE:	5/10/2023	
GROUP:		METHOD OF PAYMENT	:	FP	FPPE	<b>T&amp;E</b> ✓	CPFF		PREPARED BY:	JMP		
SUB-						LA	BOR HOURS	PER JOB CL	ASSIFICATION			
TASK No.	SUB-	TASK DESCRIPTION	Project Manager (Pusich)	Civil Engr. Associate (Puustinen)	AutoCAD Draftsman (Kemp)	Civil Engr. EIT						
1	Respond to	Bidders Questions		4								
2	Prebid Age			4	4							
3	Attend Pre		10	1								
4		ting Minutes			4							
5	Prepare Ad			4	8							
6	Prepare Bio	I Evaluation	2	1								
7												
8												
9												
10												
11												
12						-		-				
				1								
			1	1								
TOTAL HC			12	8	16	0						
	RATES (\$/HR	<u>()</u>	\$250.00		\$125.00							
LABOR CO	OSTS (\$)		\$3,000.00	\$1,520.00	\$2,000.00	\$0.00						
			EXPENSES		-			COMME	NTS:			
SUB- TASK No.		ITEM(S)	)		QUANTITY	UNIT PRICE	TOTAL PRICE			id mosting respond to b	iddor	
1	Air Fare Ju	neau/Skagway			1	\$575.00	\$575.00	auestion	s prepare prebid r	id meeting, respond to b neeting agenda/minutes, ation	nrenare	
2	Airport Park				1	\$20.00	\$20.00	addenda	, prepare bid evalu	ation	propuro	
		3				,	,					
								-11				
								-11				
								FIRM'S TOT	AL COST OF LABOR (0	r Fixed Price):	\$6,520	
						+		FIRM'S TOTAL COST OF LABOR (or Fixed Price): <i>IF CPFF</i> , TOTAL INDIRECT COST @ 0.00%				
							<b>*</b> = <b>^</b> =			5 0.00%	\$(	
					L EXPENSES:	\$595		AL EXPENSES		\$59		
		SUB-CONTRACTORS:	Firm initials a	and Price Per T	ask	T	1	FIRM'S TOT	AL COST (no Subcontra	acts or Fee)	\$7,11	
FIRM								<u> </u>				
AMOUNT	:1		1					TOTAL SUB	CONTRACTOR PRICES	:	\$0	