NEW MEXICO INTERSTATE STREAM COMMISSION

COMMISSION MEMBERS

CALEB CHANDLER, Chairman, Clovis TOM BLAINE, P.E. Secretary CALEB CHANDLER, Clovis JIM DUNLAP, Farmington BLANE SANCHEZ, Isleta MARK SANCHEZ, Albuquerque JAMES WILCOX, Carlsbad TOPPER THORPE, Cliff



BATAAN MEMORIAL BUILDING, ROOM 101 POST OFFICE BOX 25102 SANTA FE, NEW MEXICO 87504-5102 (505) 827-6160 FAX: (505) 827-6188

June 16, 2017

Mr. Ed Toms 11251 Northwest FWY. #400 Fort Collins, CO 80524

RE: Contract # 19776 Amendment #2

Dear Mr. Toms:

This letter shall serve as official notice of the approval of the amendment for contract # 19776. I have enclosed a photocopy of the approved amendment for your files.

Please make sure that all invoices that are submitted under this contract reference the appropriate contract number 19776.

6/16/17

If you have concerns or questions relating to this contract, please contact Ali Effati at (505) 827-5801.

Sincerely.

Kim Abeyta-Martinez Administrative Manager

Interstate Stream Commission

Attachment

Copy to: Ali Effati

Marcos Mendiola

Contract No.: 19776 02

AMENDMENT NO. 2 PROFESSIONAL WATER RESOURCE SERVICES BETWEEN THE NEW MEXICO INTERSTATE STREAM COMMISSION AND AECOM TECHNICAL SERVICES, INC.

16.

This Amendment to the Price Agreement # 19776 ("Amendment No. 2") is entered into by and between the Office of the State Engineer, Interstate Stream Commission, an agency of the State of New Mexico ("Agency"), and AECOM Technical Services, Inc. ("Contractor"), collectively "the Parties," effective as of the date this Amendment No. 2 is approved by the New Mexico Department of Finance and Administration.

RECITALS

THE PARTIES HERETO enter into this Amendment No. 2 on the basis of the following facts, understandings, and intentions:

- A. The Parties entered into that certain Professional Services Agreement dated May 9, 2016 (the "Original Contract"); and
- B. The Original Contract was procured and awarded by the Agency at the New Mexico CAP

 Entity ("Entity")'s behest for the purpose of exploring the various options available to the

 Entity to help identify its proposed project for a New Mexico Unit of the CAP ("Unit");

 and
- C. Article 22 of the Original Contract allows for amendment of the Contract in writing, executed by both Parties and all other required signatories; and
- D. The Secretary of the Interior transferred responsibility to design the Unit to the Entity on
 May 2, 2016; and
- E. In July 2016, the Entity decided upon a proposed action for the Unit project; and

F. In the fall of 2016, the Scope of Work for the Original Contract was amended through Amendment No. 1 in order to outline a new set of tasks for the Contractor to refine the proposed action for the Unit project selected by the Entity in July; and

- G. On February 7, 2017, representatives of the Parties and the Entity participated in a meeting with The Nature Conservancy and the New Mexico Department of Energy, Minerals and Natural Resources, at which The Nature Conservancy and the Department of Energy, Minerals and Natural Resources indicated they would not allow the Unit project proposed by the Entity to be built on the lands they jointly own; and
- H. Following this refusal, at its March 7, 2017 meeting, the Entity asked its Executive Director to explore other options and report to the Entity so it can revise its proposed project; and
- I. The Entity's Executive Director sent a letter to the Agency on April 3, 2017 requesting that the current Scope of Work be amended to obtain additional information desired by the Entity, and to enable the Entity to make an informed decision to revise its proposed action; and
- J. The Entity approved the amended Scope of Work attached hereto as Exhibit C at its May2, 2017 public meeting; and
- K. The Agency approved the amended Scope of Work attached hereto as Exhibit C at its May 8, 2017 public meeting; and
- L. The Contractor has been providing services to the Agency and the Agency is satisfied with those services, therefore the Parties wish to amend Article 2(a) Scope of Work; and

M. The Cost Limitation under the Original Contract as amended by Amendment No. 1 is not increased through this Amendment.

AGREEMENT

THEREFORE, in consideration of the foregoing recitals and the covenants and promises contained herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties hereto agree as follows:

Article 2(a) – Scope of Work, is hereby amended to read as follows:

- "(a) Generally. The Contractor shall perform the following work:
 - (1) The Contractor has completed the tasks and provided the deliverables listed in Exhibit A to the Original Contract, and has completed some of the tasks outline in Exhibit B. The tasks remaining uncompleted out of Exhibit B (Tasks 9, 10 and 12) are no longer needed. The Contractor will instead perform the tasks outlined in Exhibit C, which is attached hereto and made a part hereof.
 - (2) The Contractor shall provide professional engineering services required to complete the tasks and provide the deliverables listed in Exhibit C, which is attached hereto and made a part hereof. This work is required in light of Objective No. 1 in Exhibit A to the Original Contract.

The Contractor shall advise the Agency promptly of any problems encountered in performing its duties associated with this Agreement."

All terms, covenants and conditions contained in the Original Contract, and in Amendment No.

1, and not modified herein shall remain in full force and effect. This Amendment shall not become effective unless and until approved by the New Mexico Department of Finance and Administration.

IN WITNESS WHEREOF, the Parties have entered into this Amendment No. 2 to the Original Agreement effective as of the date of execution by the State Contracts Officer below.

By: Date: May 8, 2 Name: Ed Toms, P.E.	2017
Title: Vice President	
By: Date: Date:	109/17
Approved as to budget sufficiency By:	9/17
Approved by Agency CFO:	
By: Monica Trujillo, CFO Administrative Services Division Date: 5/9/200	17
Approved as to legal form and sufficiency: By:	9-17
TAXATION AND REVENUE DEPARTMENT	
The records of the Taxation and Revenue Department of the State of New Contractor is registered with the Taxation and Revenue Department to pay compensating taxes. and will not confirm or deny taxability state contained in this contract.	y gross receipts and
By: Www Awards Date: 5-9.1	7
DEPARTMENT OF FINANCE AND ADMINISTRATION By:	16/17

By: Name: Ed Toms, P.E. Title: Vice President	Date: May 10, 2017
AGENCY:	
By: Tom Blaine, P.E., State Engineer As Secretary for the NM Interstate Stream	Date:
Approved as to budget sufficiency	
By: Jeff Primm, Director Administrative Services Division	Date:
Approved by Agency CFO:	
By: Monica Trujillo, CFO Administrative Services Division	Date:
Approved as to legal form and sufficiency:	
By:Office of the ISC General Counsel	Date:
TAXATION AND REVENUE DEPARTMENT	
The records of the Taxation and Revenue Departm Contractor is registered with the Taxation and Rev compensating taxes.	nent of the State of New Mexico reflect that the venue Department to pay gross receipts and
ID Number: 02450666004	
Ву:	Date:
DEPARTMENT OF FINANCE AND ADMINIST	TRATION
By: State Contracts Officer	Date:

Exhibit C Phase IIB Services

Phase IIB – Evaluation of components for consideration of a revision to the proposed action for the NM Unit.

Tasks are not necessarily presented in order. No task will begin until NTP is issued by the ISC.

Task	Description	Deliverables	Cost	Due Date
14.0	Project Management		\$42,328	15 Weeks following NTP from ISC
14.1	Meekly Meetings: AECOM Project Manager will conduct weekly conference calls with the ISC and the NM CAP Entity Technical Representative. During these calls, AECOM will provide a summary of technical work accomplished; work anticipated for the next month, schedule update, and areas of concern, if any. Internet video conferencing and/or net meetings will be used as much as possible to help reduce project costs.			
14.2	Prepare Monthly Status Reports: AECOM Project Manager will provide monthly status reports, in combination with the monthly invoices presenting costs incurred in the prior month by task. The monthly status reports will address the following: Key performance indicators (KPI) Percent of work accomplished in the previous month by task Earned Value tracking will be used to present the monthly summary which will include burndown chart, Cost Performance Index (CPI), and	Monthly status reports to be included with the monthly invoices submitted by AECOM.		

	Schedule Performance Index (SPI) charts. - Meetings held and relevant action items - Problems encountered and solutions implemented or recommended - Cost and schedule status - Work scheduled for the next month			
15.0	Surface Diversions and Surface Diversion	n Locations	\$142,724	
15.1	 Develop engineering concepts (supported by engineering studies) for diversion alternatives and diversion locations in the Mogollon basin, on private lands outside the National Forest Boundary, between the USGS Gage (09430600) and the confluence with the Gila River, for the purpose of diverting AWSA water. Develop a single engineering concept alignment for the gravity conveyance of AWSA water for assumed storage in Winn Reservoir. Develop conceptual site access road for each conceptual diversion location. Develop conceptual comparative costs for each conceptual diversion alternative and location. Conduct a single site visit to evaluate hydraulic, geomorphic and biological aspects of the conceptual Mogollon Creek diversion alternatives and locations. Develop 1D HEC-RAS hydraulic model of bounding river reach for the conceptual project alternative locations. Assumptions: 	 Summary of conceptual diversion alternatives and locations, access roads, and conveyance to be included in the technical memorandum to be prepared as a supplement to the Phase I Report. Conceptual engineering drawings of alternative structures and topographical maps of locations showing associated infrastructure with approximate water surface elevations. Summary of site conditions including but not limited to, bed material sizes, vertical and lateral geomorphic stability of potential diversion locations based on available data to be included in the technical memorandum to be prepared as a supplement to the Phase I Report. 		

	Surface diversion concepts will		
62	be similar to previous surface diversion concepts developed for the Gila River Diversion Conceptual Assessment.		
	 No more than two (2) conceptual diversion alternatives will be developed for up to three (3) separate locations. 		· ·
	 Locations of conceptual diversion alternatives will be plotted on maps indicating land ownership based on existing County GIS databases. 		
	 A single engineering concept alignment for each conceptual diversion location will be developed for the purposes of providing gravity conveyance of AWSA water to Winn Reservoir and to avoid USFS Roadless Areas and Wilderness Area. 	·	
	Groundwater Pumping:	Summary of conceptual	
15.2	Develop engineering concepts (supported by engineering studies) for permanent facilities for extraction of groundwater from a new location within the Cliff-Gila valley to divert AWSA water under the influence of surface water through Ranney Wells or infiltration galleries (location, separation between wells and number of wells to be evaluated). AWSA water diverted for these conceptual alternatives shall be assumed to be used directly in the Cliff-Gila Valley or stored in Winn Reservoir.	groundwater pumping alternatives and locations to be included in the technical memorandum to be prepared as a supplement to the Phase I Report. Conceptual engineering drawings of alternative structures and topographical maps of locations showing associated infrastructure with approximate water surface elevations, to be based on existing ISC LiDAR data. Summary of site conditions including but not limited to, bed	
į	 Develop conceptual comparative costs for each conceptual pumping alternative and location. 	material sizes, vertical and lateral geomorphic stability of potential diversion locations	
	 Conduct a single site visit to evaluate hydraulic, geomorphic and biological aspects of the conceptual groundwater pumping alternatives and locations. 	based on available data to be included in the technical memorandum to be prepared as a supplement to the Phase I Report.	
	 Develop 1D HEC-RAS hydraulic 		

	model of bounding river reach for the conceptual project alternative locations.		
	Assumptions:		
	Pumped groundwater concepts will be similar to those presented in the Phase 1 Report.		
	No more than two (2) conceptual diversion alternatives will be developed for up to three (3) separate locations.	¥	
	 Locations of conceptual pumping alternatives will be plotted on maps indicating land ownership based on existing County GIS databases. 		
	Upper Gila Surface Diversion :	Summary of site conditions	
	 Conduct a single site visit to evaluate hydraulic, geomorphic and biological aspects of the conceptual Upper Gila Surface diversion alternatives and locations. 	including, but not limited to, bed material sizes, vertical and lateral geomorphic stability of potential diversion locations based on available data to be included in the technical	
15.3	 Develop 1D HEC-RAS hydraulic model of bounding river reach for the conceptual project alternative locations. 	memorandum to be prepared as a supplement to the Phase I Report.	
	 To supplement Tasks 13.1 and 13.3 under Phase 2 scope of work 		
3.5	San Francisco Surface Diversion:	Summary of site conditions	
15.4	 Conduct a single site visit to evaluate hydraulic, geomorphic and biological aspects of the conceptual San Francisco diversion alternatives and locations. 	including but not limited to, bed material sizes, vertical and lateral geomorphic stability of potential diversion locations based on available data to be included in the technical	
	 Develop 1D HEC-RAS hydraulic model of bounding river reach for the conceptual project alternative locations. 	memorandum to be prepared as a supplement to the Phase I Report.	
	To supplement Task 13.2 under Phase 2 scope of work		
16.0	Gila/Mogollon Basin Yield Model	.	\$111,480
16.1	Diversion Model	AECOM will prepare a Task Memorandum documenting the	
	AECOM will review the ISC, NM	Memoralidum documenting tile	

	CA	P Entity (Allen Campbell), and		analysis of the three diversion		
	Co	ha models, confirming the		models, with an explanation of		
		mulas used throughout each		the differences between the		
	of t	the models.		methods, as well as the updated		
	l	eate an updated diversion		diversion model.		
		del that reconciles the erences to the extent				
		erences to the extent ssible.				
44	• '			•		
		aluate that the updated ersion model replicates the		*		
		ent of the CUFA, and takes				
	1	account the Globe Equity				
		cree and other relevant water				
	_	nts requirements.				
		sed on the review of the ISC, I CAP Entity (Allen Campbell),				
		d Coha models, AECOM will				
		cument the assumptions in the				
		dated diversion model,				
		luding the assumptions made the model development and				
		eration.				
	• AF	COM will develop a "line				•7)
		gram" to graphically explain				
	the	model flow within the				
	spr	eadsheets.				
	Yield Mod	lel	•	AECOM will prepare a Task		
	• A	GOLDSIM Model will be		Memorandum describing the		
		veloped to simulate the		hydrologic yield that may be expected based upon storage		
	•	eration of both a surface water boundment and Aquifer		type (Surface Reservoir or ASR),		
		rage and Recovery (ASR),		sizing, location, diversion rate		
	bas	sed on the updated diversion		and delivery rate.		
	mo	del.	•	AECOM will document the		
		ng the output from the		amount of water that cannot be		
	•	dated diversion model (Task		captured and used in the Cliff-		
16.2		 up to 6 simulations will be with differing storage and 		Gila Valley, and will be available		
		mand sizing.		for diversion in the Virden Valley.		
	• Der	mands may have to be	•	AECOM will evaluate transit loss		
		usted based upon diversion		from the point of return flow in the Cliff-Gila Valley to the		
	and	delivery points.		diversion in the Virden Valley.		
		COM will document the		•		
		sumptions for the inputs to the	•	AECOM will provide recommendations for additional		
	yiel rec	d model and make ommendation on improving		water availability modeling		
		yield estimates through		needed, if any.		
		litional data collection.				
					<u></u>	L

17.0	Screening of Components and System C	oncepts	\$160,384
	A feasibility-level screening, development and assessment process will be conducted for the surface diversions and groundwater pumping concepts (i.e. components comprised of various infrastructure elements) described in Phase 3 Task 2. Additionally, this task will evaluate On-Farm Pond concept (Phase 1 Component 6 Cliff-Gila Valley Storage) - AWSA water to on-farm ponds to be supplied by diversion at Upper Gila, Ft. West or groundwater under the influence of surface water.	Supplement to the Phase 1 Report that includes: Conceptual engineering drawings of diversion structures, topographical maps of diversion locations showing associated infrastructure with water elevations.	
	The comparative screening analysis will be conducted using the same methods and criteria that were applied in Section 4 of the Phase I Report to the extent possible. If needed, the screening criteria will be modified to reflect new limitations.		
17.1	Assumptions:		
	The following components will be screened:		
	 Mogollon Surface Diversion – up to two (2) conceptual diversion alternatives at up to three (3) locations will be evaluated. Groundwater pumping from a new location within the Cliff-Gila valley. Upper Gila Surface Diversion – up to two (2) conceptual diversion alternatives at up to three (3) locations will be evaluated. San Francisco Surface Diversion 		
	 San Francisco Surface Diversion up to two (2) conceptual diversion alternatives at up to three (3) locations will be evaluated. On-Farm Pond locations (Phase 1 Component 6 Cliff-Gila Valley Storage). AWSA water to On-Farm Ponds to be supplied by diversion at Upper Gila, Ft. West 		

	or groundwater under the influence of surface water. Evaluate re-diverted water through Ranney Wells or infiltration galleries at the On-Farm Pond location to be used directly in the Cliff-Gila Valley or stored in Winn Reservoir. Five (5) components with associated elements will be screened to develop three (3) system alternatives (Gila/On Farm Storage and San Francisco and Mogollon) to compare for the selection of an amended proposed action. The screening will be utilized to aid the NMCAP Entity to determine an amended proposed action to be carried forward for further evaluation in the NEPA process.			
18.0	Presentation to NM CAP Entity		\$11,124	
18.1	The AECOM Team will present the results of the Supplement to the Phase I Summary Report to the NM CAP Entity. Resource specialists will also be available by telephone to answer technical questions related to the system concepts screening and development process. Assumptions: A PowerPoint presentation will be prepared. The meeting will be held in Silver City, New Mexico. 1 day for the meeting and one day for travel by the AECOM representatives.	 PowerPoint presentation In the event the NM CAP Entity makes a decision based on AECOM's work in this amended scope of work, AECOM will assist the NM CAP Entity in preparing a letter to the Bureau of Reclamation that describes the amended proposed action selected by the NMCAP Entity. 		
19.0	Additional Work as Directed		\$30,000	As Directed by the ISC
19.1	 AECOM will perform additional work as required. 	As required.		
		Subtotal	\$498,040	
		NMGRT	\$36,419	
		Total	\$534,459	



United States

P.O. Box 25102 Santa Fe NM 87504-5102

Office of State Engineer

Vendor: 0000074387

AECOM TECHNICAL SERVICES, INC. 11251 NORTHWEST FWY #400

FORT COLLINS CO 80524-0000

State of New Mexico Purchase Order DUPLICATE Purchase Order 55000-000016326

PO Number to be on all Invoices and Correspondence

Dispatch via Print

Revision Date 10/26/2016 Payment Terms Freight Terms Ship Via Pay Now FOB Destination Best Way Buyer Phone

STEVEN Ship To:

P.O. Box 25102 Santa Fe NM 87504-5102

Bill To:

P O Box 25102

Santa Fe NM 87504-5102

United States

Origin:	EXC Exc\Ex	cl #: 13-1-99A						
Line-Sch	Item/Description	<u>m</u>	Mfg ID	Qu	antity UON	PO Price	Extended Amt	Due Date
1- 1	FY17, Profession Agreement for E Services for the Central Arizona	Engineering Design NM Unit of the			1.00 EA	702,650.00	702,650.00	10/26/2016
	55000-30810	-Z80126-535200	9144	3-30000 Sch	edule Tota	ı	702,650.00	
	Contract ID:	000000000000000000000000000000000000000	019776 01	Contract Line:	0	Release: 1		
				lten	Total		702,650.00	
2- 1	FY17, Profession Agreement for E Services for the Central Arizona	ingineering Design NM Unit of the			1.00EA	133,350.00	133,350.00	10/26/2016
	55000-30810-	-A150100-535200	916	48-50000 Sch	edule Tota	I	133,350.00	
	Contract ID:	000000000000000000000000000000000000000	019776 01	Contract Line:	0	Release: 2		
				Iten	Total		133,350.00	
				Tota	ni PO Amoi	unt	836,000.00	

Agency Approvel - I certify that the proposed purchase represented by this document is authorized by and is made in accordance with all State (and if applicable Federal) legislation rules and regulation. I further certify that adequate unencumbered cash and budget expenditure authority exists for this proposed purchase and all other outstanding purchase commitments and accounts payable.

Authorized Signature