SUPPLEMENTAL AGREEMENT NO. 1 TO ENGINEERING SERVICES CONTRACT

This Supplemental Agreement is made part of an agreement dated October 15, 2021 between the Jackson County Legislature and Anderson Engineering, Inc. for design and construction inspection of project BRO-B048 (059). The purpose of this Supplemental Agreement is to add Jackson County Public Water Supply District 16 waterline relocation design within the limits of the project. These additional services shall be in an amount not to exceed Sixteen Thousand Five Hundred Dollars (\$16,500.00) without further authorization. The total design phase services shall be in an amount not to exceed One Hundred Four Thousand, Three Hundred Dollars (\$114,500.00). Attachment A outlines the scope and cost breakdown for this Supplemental Agreement.

Supplemental Agreement No. 1 accepted as defined herein:

OWNER: JACKSON COUNTY	ENGINEER: ANDERSON ENGINEERING, INC
BY:	BY: Say Shack
TITLE: Director Public Works	TITLE:Vice President
DATE:	DATE: June 28, 2022
ATTEST: BY:	BY: Kind 41 Mats
TITLE:	TITLE: Project Manager DATE: 6/28/2022
Executed by the County on the day of	, 2022.

Anderson Engineering, Inc. 941 W. 141st Terrace, Suite A Kansas City, Missouri 64145

ATTACHMENT A

Jackson Co Public Water Supply District #16 Relocation

Pre-Contract Anticipated Design:

The initial replacement design was to replace the existing double cell RCB with another RCB. During conceptual design an alternative layout was developed that reduced the overall project cost of the project, improved the stream flow allowing free movement of aquatic life under the bridge and prevents continuation of the stream head cutting. The County and Consultant's design assumption was any water line was located within the existing right-of-way.

Discovery:

During property title searching it was discovered and confirmed the PWSD #16 has a small water main on the south side of the road in a private easement and will need an adjustment to its location.

Resolution:

Due to changing the existing channel profile to reduce stream headcutting, it will be prudent to relocate the water main as part of the bridge construction project to avoid conflicts with the new channel. This will include potholing (by PWSD #16) near the tie-in points on either side of the creek to more accurately locate the existing line depth. PWSD #16 will provide plans of the existing water line construction to AE.

Additional Required Plans:

Plan & profile; detail sheet(s); quantity sheet.

Additional Required Documents:

 $Specification\ sections\ on\ waterline;\ Engineer's\ Opinion\ of\ Construction\ Cost.$

Additional Meetings:

Kickoff, Preliminary Design Review and Final Design Review Meetings with County and PWSD #16 are included.

			E	Estima	ate of Cos	t							
				Р	roject	Design		Senior					
Preliminary Engineering			PM	Er	ngineer	Engineer		Tech		RLS	Clerical	Subtotal	
Task		\$	63.50	\$	51.00	\$ 36.00	\$	32.00	\$	52.00	\$ 24.00		
1. Project Coordination and Meetings													
1.1 Kickoff Meeting with JCPWSD #16					2	2						\$ 174.00	3%
1.1 Preliminary Design Review Meeting					2	2						\$ 174.00	3%
1.1 Final Design Review Meeting					2	2						\$ 174.00	3%
1.1 Project Coordination			8								4	\$ 604.00	11%
2. Preliminary Design													
2.2.4 Utility Relocation Report						2				1		\$ 124.00	2%
2.3 Site Investigation										1		\$ 52.00	1%
2.7 Miscellaneous - Waterline					1	2		8				\$ 379.00	7%
2.7 Waterline Preliminary Plan Submittal						2						\$ 72.00	1%
4. Final Design													
4.4 Waterline Plan & Profile			2		1	4		16				\$ 834.00	15%
4.4 Waterline Detail Sheets (2)					1	8		32				\$ 1,363.00	24%
4.4 Waterline Quantity Sheet					1	4		8				\$ 451.00	8%
5. Final Plans Specifications & Estimate													
5.1 Final Waterline Plan Submittal			2		2	2						\$ 349.00	6%
5.3 Waterline Specs & Engineer's Estimate					2	6					2	\$ 366.00	6%
5.3 Quality Assurance			4		4							\$ 458.00	8%
5.4 MoDOT Submittal					2							\$ 102.00	2%
	Total Manhours =		16		20	36		64		2	8		
												5 6775 00	4000/
					Base Salary Cost for PE =							\$ 5,676.00	100%
					28% Payroll OH =							\$ 1,589.28	
								, ka oh =				\$ 6,640.92	
						14.8%	Fix	ed Fee =	=			\$ 2,058.12	
				Tota	ıl Labor. C	verhead a	nd f	ixed Fe	e =			\$ 15,964.32	
Expenses					•								
# of trips:	= 4	n	niles/trip =		100								
Travel	400 miles @		\$0.585						\$	234.00	44%		
Per Diem	0 days @	\$	150						\$	-	0%		
Printing, Phone, Misc Expenses	,- C	•							\$	301.68	56%		
					Total Expenses =							\$ 535.68	
			-										

Total Supplemental Agreement #1 = \$ 16,500.00

Summary Design Phase:

Original Agreement Supplemental Agreement #1 \$ 98,000.00 \$ 16,500.00

Total \$ 114,500.00