

City of Fayetteville Staff Review Form

2019-0240

Legistar File ID

5/7/2019

City Council Meeting Date - Agenda Item Only  
N/A for Non-Agenda Item

Paul Libertini

4/19/2019

ENGINEERING (621)

Submitted By

Submitted Date

Division / Department

Action Recommendation:

A Resolution to approve Supplement Agreement #1 to the contract with Burns & McDonnell Engineering Company, Inc. in an amount not to exceed \$50,439 for additional design services associated with the design and construction of the Sain Street Extension project, and to approve a Budget Adjustment.

Budget Impact:

4520.800.9556-5314.00

Sales Tax Construction Project

Account Number

Fund

06035.3400

Sain Street Construction

Project Number

Project Title

Budgeted Item? Yes

Current Budget \$ 32,984.00

Funds Obligated \$ 26,421.00

Current Balance \$ 6,563.00

Does item have a cost? Yes

Item Cost \$ 50,439.00

Budget Adjustment Attached? Yes

Budget Adjustment \$ 55,000.00

Remaining Budget \$ 11,124.00

V20180321

Purchase Order Number: 2016-00000620

Previous Ordinance or Resolution # 64-16

Change Order Number:

Approval Date:

Original Contract Number: 2408

Comments:



**MEETING OF MAY 7, 2019**

**TO:** Mayor and City Council

**THRU:** Don Marr, Chief of Staff  
Garner Stoll, Development Services Director  
Chris Brown, City Engineer

**FROM:** Paul Libertini, Staff Engineer 

**DATE:** April 16, 2019

**SUBJECT:** **Sain Street Extension - Supplement Agreement #1 with Burns & McDonnell Engineering Company**

---

**RECOMMENDATION:**

Staff recommends City Council approval of Supplemental Agreement #1 to the contract with Burns & McDonnell Engineering Company in the amount of \$50,439 for additional services.

**BACKGROUND:**

The proposed Sain Street Extension project has been identified on the Master Street Plan since at least the year 2000. The Fayetteville Expressway Economic Development Corridor Study (FEEDC) of 2006-2007 developed a conceptual layout for the Sain Street Connection to the Flyover/Fulbright Expressway, Hwy. 71B and Joyce Boulevard. The Fayetteville Mobility Plan of 2107 includes the Sain Street Extension in the Long-Term Improvements to N. College (Hwy 71B). The current 71B Corridor Study is looking at some innovative concepts of connecting the Fulbright Expressway, Hwy. 71B, Sain Street and N. Front Street for better, safer access while increasing economic opportunities.

Thus far, the City has been awarded \$1,075,000 in Federal funding for Engineering, R/W and Utilities with a City match of \$287,000. To date, the project has spent approximately \$450,000 of Federal dollars for engineering services. If the project is not completed, the City would have to reimburse the State for this expenditure. The estimated construction cost of this project is \$4.8 Million. The City will be requesting Federal funding of 80% or \$3.8 Million for construction but we will be competing with our neighboring cities for a limited amount of Federal funding to our region which is approximately \$7 Million per year. It should also be noted that the City has collected approximately \$250,000 from developers for the construction of a bridge over Mud Creek which is part of the Sain Street Extension project. These funds would also have to be returned to the developers if the bridge was not constructed.

The design plans for Sain Street Extension are nearing completion. The City has hired a real estate appraisal firm to evaluate the cost of the land to be acquired for this project and the City has received approximately 50% of the appraisal reports to date. These reports will have to be reviewed and approved by the ARDOT (Arkansas Department of Transportation) after which the

City will be allowed to meet with the property owners and present offers to purchase r/w and easements.

**DISCUSSION:**

Supplemental Agreement #1 to the engineering design contract with Burns & McDonnell Engineering Company will cover the following design elements that were not included in the original agreement for a cost of \$50,439:

- Provide analysis, design and exhibits that extended the project beyond the intersection of Hwy. 71B and Millsap to include the analysis of a Backage Road and a roundabout at the intersection of Millsap and Backage Road
- Widen the roadway & bridge typical section to accommodate the addition of buffered bicycle lanes
- Provide a design to relocate the existing parking lot owned by the University of Arkansas which is being eliminated due to the extension of Sain Street
- Elevate Mud Creek Trail by 2 feet under the proposed bridge to reduce the impact to the trail during major stormwater events
- Relocate the existing trail lighting to the new location and add lighting under the proposed road bridge
- Provide additional survey work to stake the proposed rights-of-way and easements to assist the real estate appraiser in evaluating the cost of land acquisition

On February 26<sup>th</sup>, the Transportation Committee voted to forward this item to the City Council with a recommendation for approval.

**BUDGET/STAFF IMPACT:**

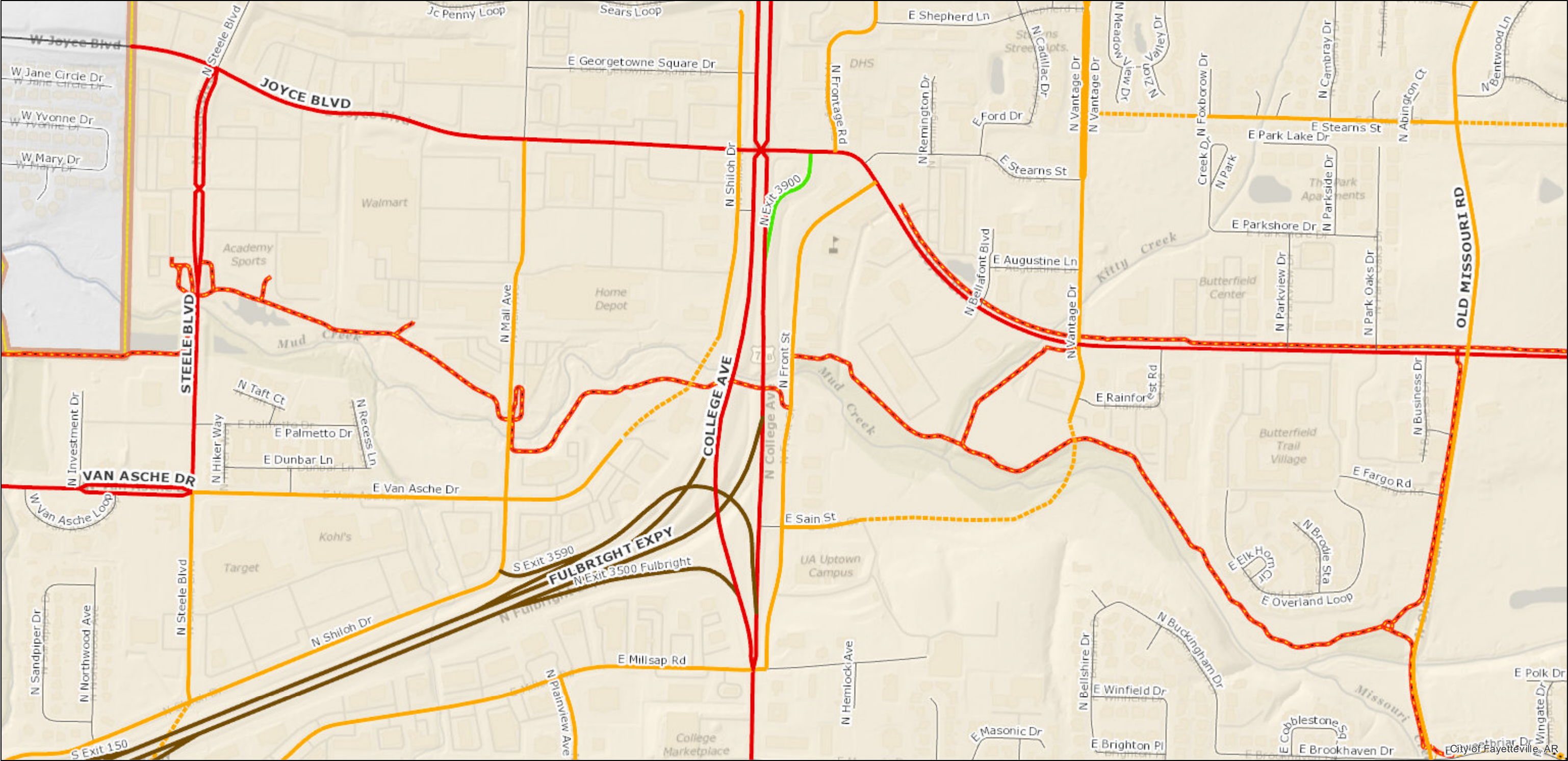
Amendment #1 will be paid from the Transportation Bond Program fund with the possibility of partial funding with Federal dollars as the budget allows.

**Attachments:**

Supplemental Agreement #1, Job 040688, Sain Street Extension  
Reference Drawings (2 sheets)



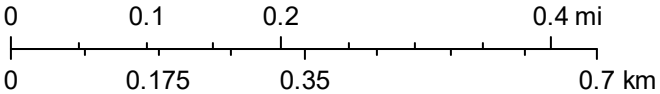
# Fayetteville, AR



2/20/2019, 5:33:17 PM

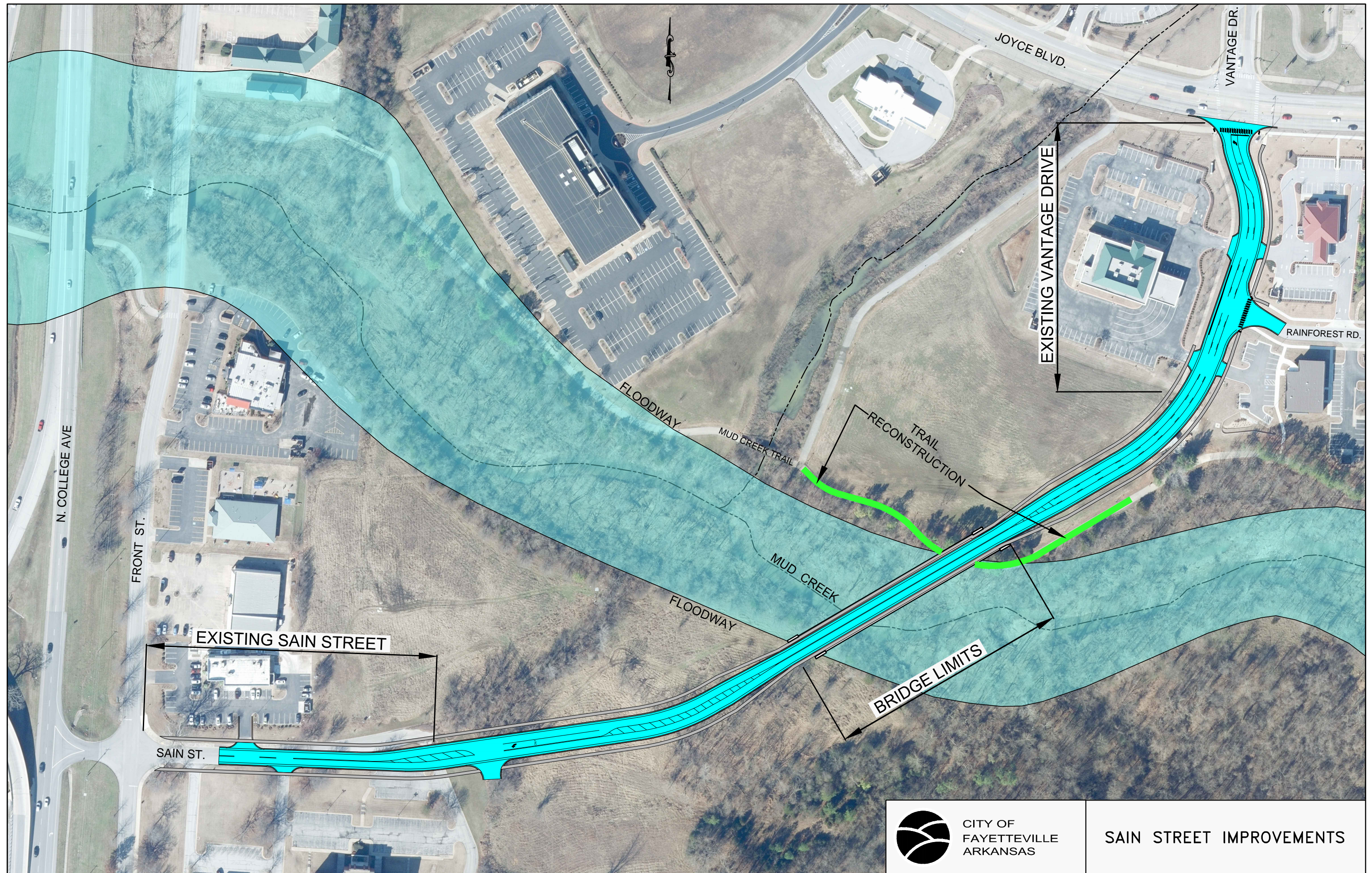
1:9,028

<b>Existing Street</b>	<b>Planned Street</b>	<b>Downtown Master Plan</b>	<b>Other Street</b>
FREEWAY/EXPRESSWAY	INSTITUTIONAL	COLLECTOR	STREET 40 ONE WAY
PRIN ARTERIAL PKWY	FREEWAY/EXPRESSWAY	LOCAL	STREET 45
PRINCIPAL ARTERIAL	PRIN ARTERIAL PKWY	LOCAL URBAN	Major
MINOR ARTERIAL	PRINCIPAL ARTERIAL	MAIN STREET 63	Minor
COLLECTOR	MINOR ARTERIAL	STREET 37	Existing Shared-Use Paved Trail
			Future Shared-Use Paved Trail
			Planning Area Boundary
			Fayetteville City Limits



The data contained herein was compiled from various sources for the sole use and benefit of the City of Fayetteville Geographic Information System and the public agencies it serves. Any use of the data by anyone other than the City of Fayetteville is at the sole risk of the user, and by acceptance of this data, the user does hereby agree to indemnify the City of Fayetteville and hold the City of Fayetteville harmless from and without liability for any claims, actions, cost for damages of any nature, including the city's cost of defense, asserted by user or by another arising from the use of this data. The City of Fayetteville makes no express or implied warranties with reference to the data. No word, phrase, or clause found herein shall be construed to waive that tort immunity set forth under Arkansas law.





CITY OF  
FAYETTEVILLE  
ARKANSAS

SAIN STREET IMPROVEMENTS



**Supplemental Agreement No. 1**  
**Job No. 040688**  
**FAP. No. STPU-9142(39)**  
**Sain Street Extension (Fayetteville) (S)**

**Date:** \_\_\_\_\_

**WHEREAS**, the City of Fayetteville, Arkansas and Burns & McDonnell Engineering Company, Inc. entered into an Agreement for Engineering Services on March 15, 2016; and,

**WHEREAS**, representatives of the City of Fayetteville, Arkansas requested work in addition to that defined in the Agreement.

**NOW THEREFORE**, the following modifications will be made to the Agreement to include the additional work requested:


**MODIFICATIONS:**

- 1) The "Contract Ceiling Price" (Section 1.2) is increased from \$557,695 to \$608,134.
- 2) The "Title I Services Ceiling Price" (Section 1.12) is increased from \$557,695 to \$608,134.
- 3) The fixed fee (Section 3.4) is increased from \$35,192 to \$37,321.
- 4) See Attachment A for modifications to the scope of work.
- 5) The Completion Date (Section 17.1) for Title I Services shall be revised from August 15, 2017 to June 28, 2019, not including bid phase services.
- 6) See Attachment B for modifications to Appendix A - Justification of fees and costs

**IN WITNESS WHEREOF**, the parties execute this Supplemental Agreement No. 5, to be effective upon the date set out above.

BURNS & MCDONNELL  
ENGINEERING COMPANY, INC.

CITY OF FAYETTEVILLE, AR

BY:   
Steven Beam, P.E.  
Business Manager

BY: \_\_\_\_\_  
Lioneld Jordan  
Mayor

**Attachment A**  
**SCOPE OF WORK MODIFICATIONS**

**Supplemental Agreement No. 1**  
**Job No. 040688**  
**FAP. No. STPU-9142(39)**  
**Sain Street Extension (Fayetteville) (S)**

The City of Fayetteville (City), in cooperation with the Arkansas Department of Transportation (ArDOT), formerly known as the Arkansas State Highway and Transportation Department (AHTD), and the Federal Highway Administration (FHWA), engaged Burns & McDonnell Engineering Company, Inc. to provide engineering services for the extension of Sain Street in Fayetteville, Arkansas. Section 7 of the Agreement for Engineering Services set forth the scope of services to be performed. The following services are required in addition to those services previously specified:

**7. ADDITIONAL INFORMATION & TITLE I SERVICES TO BE PROVIDED BY THE CONSULTANT.**

1. During the alternatives analysis phase of the project, additional designs and exhibits were prepared that extended beyond the intersection of Hwy. 71B and Millsap to include the analysis of a Backage Road and a Roundabout at the intersection of Millsap and Backage Road. These improvements required coordination with the University of Arkansas and Christian Life Cathedral church and additional traffic evaluations to understand modifications at the intersection with Millsap and Front Street in order to maximize traffic relief in the interim condition of the Sain Street Extension.
2. During the development of 60% plans but after roadway modeling and storm drainage design were complete and portions of the ROW plans had been developed, the City requested that the roadway be widened to provide for a striped buffer between vehicular and bike lanes. This work required revisions to the typical section, roadway modeling, drainage design, and all plan sheets showing a plan view of the project.
3. The above described change also required revision to the Bridge Layout that was approved but awaiting ArDOT signature. Upon completion of that revision, the Bridge Layout was resubmitted for ArDOT approval.
4. The agreed upon concept for the project required that parking areas at the University of Arkansas facilities be reconstructed to accommodate the roadway and drives. This required additional coordination and development of parking lot concepts to present to the University.

Attachment B - Justification of Costs and Fees - SA 1  
December 21, 2018  
Job 040688 Sain Street Extension (Fayetteville) (S)  
Washington County  
**TOTAL PROJECT SUMMARY**

<b>TITLE I SERVICES</b>	<b>HOURS</b>	<b>SALARY</b>	<b>FEE</b>	<b>EXPENSES</b>	<b>TOTAL</b>
<b>PROJECT MANAGEMENT</b>	143	\$22,395	\$2,687	\$0	\$25,082
<b>PM - SUPPLEMENTAL AGREEMENT NO. 1</b>	32	\$5,772	\$693	\$0	\$6,465
<b>ENVIRONMENTAL CLEARANCE DOCUMENTATION</b>	240	\$31,143	\$3,737	\$3,268	\$38,148
<b>INTERCHANGE JUSTIFICATION REPORT</b>	148	\$18,728	\$2,247	\$6,300	\$27,275
<b>TRAFFIC DESIGN &amp; PLANS</b>	186	\$23,478	\$2,817	\$8,909	\$35,204
<b>TRAFFIC - SUPPLEMENTAL AGREEMENT NO. 1</b>	48	\$5,531	\$664	\$0	\$6,195
<b>ROADWAY DESIGN &amp; PLANS</b>	360	\$46,174	\$5,541	\$340	\$52,055
<b>BRIDGE DESIGN &amp; PLANS</b>	1,188	\$151,357	\$18,163	\$264	\$169,784
<b>BRIDGE - SUPPLEMENTAL AGREEMENT NO. 1</b>	52	\$6,433	\$772	\$0	\$7,205
<b>ORIGINAL SUBTOTAL TITLE I</b>	<b>2,265</b>	<b>\$293,275</b>	<b>\$35,192</b>	<b>\$19,081</b>	<b>\$347,548</b>
<b>REVISED SUBTOTAL TITLE I</b>	<b>2,397</b>	<b>\$311,011</b>	<b>\$37,321</b>	<b>\$19,081</b>	<b>\$367,413</b>
<b>SUBCONSULTANTS TITLE I</b>					
McClelland Consulting Engineers, Inc.	2,054	\$169,046	\$20,282	\$8,709	\$198,037
MCE Supplemental Agreement No. 1	316	\$27,289	\$3,275	\$10	\$30,574
Harbor Environmental, Inc.	123	\$9,958	\$1,195	\$957	\$12,110
<b>SUBTOTAL SUBCONSULTANTS TITLE I</b>	<b>439</b>	<b>\$37,247</b>	<b>\$4,470</b>	<b>\$967</b>	<b>\$240,721</b>
<b>REVISED TOTAL TITLE I</b>	<b>2,836</b>	<b>\$348,258</b>	<b>\$41,791</b>	<b>\$20,048</b>	<b>\$608,134</b>



Attachment B - Justification of Costs and Fees - SA 1  
December 21, 2018  
Job 040688 Sain Street Extension (Fayetteville) (S)  
Washington County

**PM - SUPPLEMENTAL AGREEMENT NO. 1**

MANHOURS								
TASK	PD	PM	SE	STRE	STFE	TECH	ADMIN	TOTAL
<b>General</b>								
Coordination of Roadway & Bridge Modifications		10						10
Coordination for UA Parking Modifications		12						12
Coordination of Add. Millsap & Backage Rd. Alts.		10						10
								0
<b>PM - SUPPLEMENTAL AGREEMENT NO. 1</b>	0	32	0	0	0	0	0	32

LABOR COSTS			
Category - Description	Rate	MH	Amount
PD - Project Director	\$70.00	0	\$0
PM - Project Manager	\$60.00	32	\$1,920
SE - Senior Engineer	\$50.00	0	\$0
STRE - Structural Engineer	\$50.00	0	\$0
STFE - Staff Engineer	\$40.00	0	\$0
TECH - Technician	\$35.00	0	\$0
ADMIN - Administrative Assistant	\$25.00	0	\$0
Subtotal			\$1,920
Overhead		200.61%	\$3,852
Subtotal			\$5,772
Fee			\$693
FCCM		0.00%	\$0
Subtotal Labor Costs			<b>\$6,465</b>

EXPENSES				
ITEM	Quantity	Unit	Rate	Amount
Printing (8 1/2 x 11)		each	\$0.08	\$0
Printing (11 x 17)		each	\$0.35	\$0
Plotting (22 x 34)		each	\$1.35	\$0
Mileage (2 trips at 850 miles, 2 trips at 400 miles )		mile	\$0.540	\$0
Lodging		each	\$88.00	\$0
Meals (per day)		each	\$25.00	\$0
Subtotal Expenses				\$0
<b>TOTAL COSTS - PM - SUPPLEMENTAL AGREEMENT NO. 1</b>				<b>\$6,465</b>

BASIS OF ESTIMATE
Description
Additional project management effort required by additional services described in the Scope of Work for Supplemental Agreement No. 1.

Attachment B - Justification of Costs and Fees - SA 1  
December 21, 2018  
Job 040688 Sain Street Extension (Fayetteville) (S)  
Washington County

**TRAFFIC - SUPPLEMENTAL AGREEMENT NO. 1**

MANHOURS									
TASK	PD	PM	SE	STRE	STFE	TECH	ADMIN	TOTAL	
Non-Interchange Alternatives									
Additional Alternatives Analysis for Millsap & Backage Rd.					32	16		48	
- TRAFFIC - SUPPLEMENTAL AGREEMENT NO. 1	0	0	0	0	32	16	0	48	
LABOR COSTS									
Category - Description						Rate	MH	Amount	
PD - Project Director						\$70.00	0	\$0	
PM - Project Manager						\$60.00	0	\$0	
SE - Senior Engineer						\$50.00	0	\$0	
STRE - Structural Engineer						\$50.00	0	\$0	
STFE - Staff Engineer						\$40.00	32	\$1,280	
TECH - Technician						\$35.00	16	\$560	
ADMIN - Administrative Assistant						\$25.00	0	\$0	
							Subtotal	\$1,840	
							Overhead	200.61%	\$3,691
							Subtotal	\$5,531	
							Fee	\$664	
							FCCM	0.00%	\$0
							Subtotal Labor Costs	\$6,195	
EXPENSES									
ITEM	Quantity	Unit	Rate	Amount					
Printing (8 1/2 x 11)		each	\$0.08	\$0					
Printing (11 x 17)		each	\$0.35	\$0					
Plotting (22 x 34)		each	\$1.35	\$0					
Mileage (1 trips at 250 miles one-way)		mile	\$0.540	\$0					
Lodging and Meals (\$88 Lodging, \$25 Meals)		each	\$113.00	\$0					
24-Hour Turning Movement Counts		each	\$1,080.00	\$0					
48-Hour Continuous Traffic Counts		Lane	\$700.00	\$0					
							Subtotal Expenses	\$0	
TOTAL COSTS - TRAFFIC - SUPPLEMENTAL AGREEMENT NO. 1							\$6,195		
BASIS OF ESTIMATE									
Description									
Additional concept development and traffic analyses to analyze potential modifications to Millsap Road and a proposed backage road.									



MANHOURS									
TASK	PD	PM	SE	STRE	STFE	TECH	ADMIN	TOTAL	
Additional Services									
Bridge Layout Change to match Roadway Change		2		18		32		52	
								0	
								0	
BRIDGE - SUPPLEMENTAL AGREEMENT NO. 1	0	2	0	18	0	32	0	52	
LABOR COSTS									
Category - Description						Rate	MH	Amount	
PD - Project Director						\$70.00	0	\$0	
PM - Project Manager						\$60.00	2	\$120	
SE - Senior Engineer						\$50.00	0	\$0	
STRE - Structural Engineer						\$50.00	18	\$900	
STFE - Staff Engineer						\$40.00	0	\$0	
TECH - Technician						\$35.00	32	\$1,120	
ADMIN - Administrative Assistant						\$25.00	0	\$0	
							Subtotal	\$2,140	
							Overhead	200.61%	\$4,293
							Subtotal	\$6,433	
							Fee	\$772	
							FCCM	0.00%	\$0
							Subtotal Labor Costs	\$7,205	
EXPENSES									
ITEM					Quantity	Unit	Rate	Amount	
Printing (8 1/2 x 11)						each	\$0.08	\$0	
Printing (11 x 17)						each	\$0.35	\$0	
Plotting (22 x 34)						each	\$1.35	\$0	
								Subtotal Expenses	\$0
TOTAL COSTS - BRIDGE - SUPPLEMENTAL AGREEMENT NO. 1								\$7,205	
BASIS OF ESTIMATE									
Description									
Revision of bridge layout and plans to accommodate the additional roadway width for separation between travel lanes and bike lanes.									

## Attachment B - Justification of Costs and Fees - SA 1

December 21, 2018

Job 040688 Sain Street Extension (Fayetteville) (S)

Washington County

**SUBCONSULTANT SUMMARY SUPPLEMENTAL AGREEMENT NO. 1**

<b>TITLE I SERVICES</b>	<b>HOURS</b>	<b>SALARY</b>	<b>FEE</b>	<b>EXPENSES</b>	<b>TOTAL</b>
<b>ENVIRONMENTAL CLEARANCE</b>					
<b>FIELD SURVEYS AND MAPPING</b>	27	\$1,773	\$213	\$10	\$1,996
<b>ROADWAY DESIGN &amp; PLANS</b>	147	\$14,806	\$1,777	\$0	\$16,582
<b>ROW DESIGN &amp; PLANS</b>	142	\$10,710	\$1,285	\$0	\$11,995
<b>GEOTECHNICAL</b>					
<b>FLOODPLAIN MODELING</b>					
<b>SUBCONSULTANT TOTAL TITLE I</b>	<b>316</b>	<b>\$27,289</b>	<b>\$3,275</b>	<b>\$10</b>	<b>\$30,574</b>
<b>SUBCONSULTANT TOTAL PROJECT</b>	<b>316</b>	<b>\$27,289</b>	<b>\$3,275</b>	<b>\$10</b>	<b>\$30,574</b>



Attachment B - Justification of Costs and Fees - SA 1  
December 21, 2018  
Job 040688 Sain Street Extension (Fayetteville) (S)  
Washington County

## FIELD SURVEYS & MAPPING

**MCCLELLAND CONSULTING ENGINEERS, INC.**

MANHOURS								
TASK	PRE	PM	PLS	PC	CREW	TECH	CLR	TOTAL
<b>Control Survey (CSUR)</b>								
Field Work								0
Office Computation & Mapping								0
<b>Design Survey (DSUR)</b>								
Field Work				8	8			16
Office Computation & Mapping	1	1	3			4	2	11
<b>TOTAL MH - FIELD SURVEYS &amp; MAPPING</b>	1	1	3	8	8	4	2	27
LABOR COSTS								
Category - Description	Rate	MH	Amount					
PRE - Principle Engineer	\$52.28	1	\$52.28					
PM - Project Manager	\$37.26	1	\$37.26					
PLS - Registered Land Surveyor	\$37.74	3	\$113.22					
PC - Survey Party Chief	\$28.00	8	\$224.00					
CREW - Survey Field Crewman	\$15.00	8	\$120.00					
TECH - Technician	\$24.00	4	\$96.00					
CLR - Clerical	\$21.00	2	\$42.00					
		Subtotal	\$684.76					
		Overhead	158.92%	\$1,088.22				
		Subtotal	\$1,772.98					
		Fee	\$212.76					
		FCCM	0.00%	\$0.00				
		Subtotal Labor Costs	<b>\$1,985.74</b>					
EXPENSES								
ITEM	Quantity	Unit	Rate	Amount				
Printing/Reproduction			\$0.05	\$0.00				
Printing (11 x 17)		each	\$0.10	\$0.00				
Plotting (22 x 34)		each	\$0.35	\$0.00				
Mileage (3 trips @ 6 miles)	18	mile	\$0.580	\$10.44				
Lodging		each		\$0.00				
Meals (per day)		each		\$0.00				
			Subtotal Expenses	\$10.44				
			<b>TOTAL COSTS - FIELD SURVEYS &amp; MAPPING</b>	<b>\$1,996.18</b>				
BASIS OF ESTIMATE								
Description								
Field survey associated with addition of 12,000 SF parking lot for approx 27 bays on UA Campus.								

Attachment B - Justification of Costs and Fees - SA 1  
December 21, 2018  
Job 040688 Sain Street Extension (Fayetteville) (S)  
Washington County

**ROW DESIGN & PLANS**

**MCCLELLAND CONSULTING ENGINEERS, INC.**

MANHOURS								
TASK	PRE	PM	PLS	PC	CREW	TECH	CLR	TOTAL
<b>Design Survey (DSUR)</b>								
Field Work								
Office Computation & Mapping	1	4	51					56
<b>TOTAL MH - FIELD SURVEYS &amp; MAPPING</b>	1	4	51	0	0	0	0	56
LABOR COSTS								
Category - Description						Rate	MH	Amount
PRE - Principle Engineer						\$52.28	1	\$52.28
PM - Project Manager						\$37.26	4	\$149.04
PLS - Registered Land Surveyor						\$37.74	51	\$1,924.74
PC - Survey Party Chief						\$28.00	0	\$0.00
CREW - Survey Field Crewman						\$15.00	0	\$0.00
TECH - Technician						\$24.00	0	\$0.00
CLR - Clerical						\$21.00	0	\$0.00
							Subtotal	\$2,126.06
							Overhead	158.92%
								\$3,378.73
							Subtotal	\$5,504.79
							Fee	\$660.58
							FCCM	0.00%
								\$0.00
							Subtotal Labor Costs	<b>\$6,165.37</b>
EXPENSES								
ITEM	Quantity	Unit	Rate	Amount				
Printing/Reproduction			\$0.05	\$0.00				
Printing (11 x 17)		each	\$0.10	\$0.00				
Plotting (22 x 34)		each	\$0.35	\$0.00				
Mileage (3 trips @ 6 miles)		mile	\$0.580	\$0.00				
Lodging		each		\$0.00				
Meals (per day)		each		\$0.00				
				Subtotal Expenses				
				<b>TOTAL COSTS - FIELD SURVEYS &amp; MAPPING</b>				
				<b>BASIS OF ESTIMATE</b>				
				Description				
				Time comprises 3rd & 4th set of revisions directed from City and ARDOT regards changes to ROW limits and addition of grading easements. Also includes ROW changes as result of changes to UA sidewalk & parking. Includes edits to drawing, exhibits and legal descriptions. (PLS hours logged at 102 hrs for this work)				



Attachment B - Justification of Costs and Fees - SA 1  
December 21, 2018  
Job 040688 Sain Street Extension (Fayetteville) (S)  
Washington County

## ROW DESIGN & PLANS

**MCCLELLAND CONSULTING ENGINEERS, INC.**

MANHOURS								
TASK	PRE	PM	PLS	PC	CREW	TECH	CLR	TOTAL
Staking of ROW for Appraisers		2	8	38	38			86
<b>TOTAL MH - FIELD SURVEYS &amp; MAPPING</b>	0	2	8	38	38	0	0	86
LABOR COSTS								
Category - Description	Rate	MH	Amount					
PRE - Principle Engineer	\$52.28	0	\$0.00					
PM - Project Manager	\$37.26	2	\$74.52					
PLS - Registered Land Surveyor	\$37.74	8	\$301.92					
PC - Survey Party Chief	\$28.00	38	\$1,064.00					
CREW - Survey Field Crewman	\$15.00	38	\$570.00					
TECH - Technician	\$24.00	0	\$0.00					
CLR - Clerical	\$21.00	0	\$0.00					
							Subtotal	\$2,010.44
							Overhead	158.92%
								\$3,194.99
							Subtotal	\$5,205.43
							Fee	\$624.65
							FCCM	0.00%
								\$0.00
							Subtotal Labor Costs	<b>\$5,830.08</b>
EXPENSES								
ITEM	Quantity	Unit	Rate	Amount				
Printing/Reproduction			\$0.05	\$0.00				
Printing (11 x 17)		each	\$0.10	\$0.00				
Plotting (22 x 34)		each	\$0.35	\$0.00				
Mileage (3 trips @ 6 miles)		mile	\$0.580	\$0.00				
Lodging		each		\$0.00				
Meals (per day)		each		\$0.00				
							Subtotal Expenses	\$0.00
							<b>TOTAL COSTS - FIELD SURVEYS &amp; MAPPING</b>	<b>\$5,830.08</b>
BASIS OF ESTIMATE								
Description								
Staking of proposed ROW as directed by the City to assist with ROW aquisitions. A nail will be set in a stake (in non-paved locations) or paint (in paved locations).								

Attachment B - Justification of Costs and Fees - SA 1  
December 21, 2018  
Job 040688 Sain Street Extension (Fayetteville) (S)  
Washington County

**ROADWAY DESIGN & PLANS**

**MCCLELLAND CONSULTING ENGINEERS, INC.**

MANHOURS									
TASK	PRE	PM	PE	TECH	CD	DRAFT	CLR	TOTAL	
Conceptual Design (30%)									
30% Roadway Plans including QA/QC	6	1						7	
30% Construction Estimate								0	
Preliminary Design (50%)									
50% Roadway Plans including QA/QC	1	24						25	
50% Construction Estimate	1	1						2	
Field Inspection/ Plan Review Meeting	1	1						2	
Final Design (90%)									
90% Roadway Plans including QA/QC	4	8		16				28	
Develop Final Quantities and Estimate		2						2	
Field Inspection/ Plan Review Meeting	1	3		1				5	
Final Design (100%)									
Address 90% Review Comments	1	4						5	
TOTAL MH - ROADWAY DESIGN & PLANS	15	44	0	17	0			76	
LABOR COSTS									
Category - Description						Rate	MH	Amount	
PRE - Principle Engineer						\$52.28	15	\$784.20	
PM - Project Manager						\$37.26	44	\$1,639.44	
PE - Project Engineer						\$34.13	0	\$0.00	
TECH - Technician						\$32.00	17	\$544.00	
CD - Chief Draftsman						\$27.00	0	\$0.00	
DRAFT - Draftsman						\$20.00	0	\$0.00	
CLR - Clerical						\$21.00	0	\$0.00	
							Subtotal	\$2,967.64	
							Overhead	158.92%	\$4,716.17
							Subtotal	\$7,683.81	
							Fee	\$922.06	
							FCCM	0.00%	\$0.00
							Subtotal Labor Costs	\$8,605.87	
EXPENSES									
ITEM					Quantity	Unit	Rate	Amount	
Printing (8 1/2 x 11)						each	\$0.05	\$0.00	
Printing (11 x 17)						each	\$0.10	\$0.00	
Plotting (22 x 34)						each	\$0.35	\$0.00	
Mileage (4 trips at 6 miles)						mile	\$0.580	\$0.00	
Lodging						each		\$0.00	
Meals (per day)						each		\$0.00	
Roll Plot						lf			
							Subtotal Expenses	\$0.00	
							TOTAL COSTS - ROADWAY DESIGN & PLANS	\$8,605.87	

BASIS OF ESTIMATE
Description Design of approx 12,000 SF parking lot for approx 27 bays on UA Campus. Realignment of existing sidewalk to connect to new construction. Provide connectivity to Front Street and existing UA on-site access roads. Modifications to existing parking area to increase capacity. Tree removal mitigation & landscape design. Coordination with UA and City of Fayetteville regards design.

Attachment B - Justification of Costs and Fees - SA 1  
December 21, 2018  
Job 040688 Sain Street Extension (Fayetteville) (S)  
Washington County

**ROADWAY DESIGN & PLANS**

**MCCLELLAND CONSULTING ENGINEERS, INC.**

MANHOURS									
TASK	PRE	PM	PE	TECH	CD	DRAFT	CLR	TOTAL	
Preliminary Design (50%)									
50% Roadway Plans including QA/QC	1	8						9	
50% Construction Estimate								0	
Field Inspection/ Plan Review Meeting								0	
Final Design (90%)									
90% Roadway Plans including QA/QC		16						16	
Develop Final Quantities and Estimate		2						2	
Field Inspection/ Plan Review Meeting	1	1						2	
Final Design (100%)									
Address 90% Review Comments	1	2						3	
TOTAL MH - ROADWAY DESIGN & PLANS	3	29	0	0	0			32	
LABOR COSTS									
Category - Description						Rate	MH	Amount	
PRE - Principle Engineer						\$52.28	3	\$156.84	
PM - Project Manager						\$37.26	29	\$1,080.54	
PE - Project Engineer						\$34.13	0	\$0.00	
TECH - Technician						\$32.00	0	\$0.00	
CD - Chief Draftsman						\$27.00	0	\$0.00	
DRAFT - Draftsman						\$20.00	0	\$0.00	
CLR - Clerical						\$21.00	0	\$0.00	
							Subtotal	\$1,237.38	
							Overhead	158.92%	\$1,966.44
							Subtotal	\$3,203.82	
							Fee	\$384.46	
							FCCM	0.00%	\$0.00
							Subtotal Labor Costs	\$3,588.28	
EXPENSES									
ITEM					Quantity	Unit	Rate	Amount	
Printing (8 1/2 x 11)						each	\$0.05	\$0.00	
Printing (11 x 17)						each	\$0.10	\$0.00	
Plotting (22 x 34)						each	\$0.35	\$0.00	
Mileage (4 trips at 6 miles)						mile	\$0.580	\$0.00	
Lodging						each		\$0.00	
Meals (per day)						each		\$0.00	
Roll Plot						If			
							Subtotal Expenses	\$0.00	
							TOTAL COSTS - ROADWAY DESIGN & PLANS	\$3,588.28	

BASIS OF ESTIMATE	
Description	
Revisions to design to include rerouting of electrical associated with trail lighting installed on-site after field survey complete and design phase progressed beyond 60% submittal. Includes conduit, lights, cable, and details.	



Attachment B - Justification of Costs and Fees - SA 1  
December 21, 2018  
Job 040688 Sain Street Extension (Fayetteville) (S)  
Washington County

**ROADWAY DESIGN & PLANS**

**MCCLELLAND CONSULTING ENGINEERS, INC.**

MANHOURS									
TASK	PRE	PM	PE	TECH	CD	DRAFT	CLR	TOTAL	
Preliminary Design (50%)									
50% Roadway Plans including QA/QC								0	
50% Construction Estimate								0	
Field Inspection/ Plan Review Meeting								0	
Final Design (90%)									
90% Roadway Plans including QA/QC		24						24	
Develop Final Quantities and Estimate	2	4						6	
Field Inspection/ Plan Review Meeting	1	1						2	
Final Design (100%)									
Address 90% Review Comments	1	6						7	
TOTAL MH - ROADWAY DESIGN & PLANS	4	35	0	0	0			39	
LABOR COSTS									
Category - Description						Rate	MH	Amount	
PRE - Principle Engineer						\$52.28	4	\$209.12	
PM - Project Manager						\$37.26	35	\$1,304.10	
PE - Project Engineer						\$34.13	0	\$0.00	
TECH - Technician						\$32.00	0	\$0.00	
CD - Chief Draftsman						\$27.00	0	\$0.00	
DRAFT - Draftsman						\$20.00	0	\$0.00	
CLR - Clerical						\$21.00	0	\$0.00	
							Subtotal	\$1,513.22	
							Overhead	158.92%	\$2,404.81
							Subtotal	\$3,918.03	
							Fee	\$470.16	
							FCCM	0.00%	\$0.00
							Subtotal Labor Costs	\$4,388.19	
EXPENSES									
ITEM					Quantity	Unit	Rate	Amount	
Printing (8 1/2 x 11)						each	\$0.05	\$0.00	
Printing (11 x 17)						each	\$0.10	\$0.00	
Plotting (22 x 34)						each	\$0.35	\$0.00	
Mileage (4 trips at 6 miles)						mile	\$0.580	\$0.00	
Lodging						each		\$0.00	
Meals (per day)						each		\$0.00	
Roll Plot						lf			
								Subtotal Expenses	\$0.00
TOTAL COSTS - ROADWAY DESIGN & PLANS								\$4,388.19	

BASIS OF ESTIMATE
Revisions to project design for i) elevating of trail per City request, ii) changes to design plans and all cross-sections to reflect revisions to design by way of ROW limits and grading easements.